



# Transport and medical rescue MRT

**Medical rescue** is the part of the health care system whose purpose is to provide immediate assistance to people in a state of sudden danger to life or health.

It covers actions taken by

**Medical Rescue Teams (MRT)**

at the scene of an incident and during transport of a patient to hospital.

The objective of this material is to familiarise the target group with:

- the principles of correct emergency calls,
- the most common situations requiring the intervention of MRT,
- the reasons for unjustified trips
- and the basic principles of first aid.

# Correct call of the Medical Rescue Team

Emergency numbers:

**112**

European Emergency Number  
receiving all calls throughout  
Europe - notification of all services.

<b>999</b> Emergency medical service	<b>998</b> Fire department	<b>997</b> Police
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**Remember**, when you witness an event in which there is a threat to life or health and immediate help is needed, do not hesitate, call 112, or 999.

You will then speak to an **emergency medical dispatcher** who will assess the situation, decide whether to send an Emergency Medical Rescue Team or refer you to an appropriate other form of assistance.

**Jokes, dead calls or false reports are unacceptable, reprehensible and blameworthy behaviour - they can delay help for those really in need and are punishable by law. Every call is recorded both by voice and by recording the caller's phone number.**



Using 112, you can make contact even if your mobile phone is blocked throughout Europe, just by selecting the tile (handset icon – emergency call) on the screen.

When calling for help, stay calm, provide brief and factual information and follow all instructions communicated by the medical dispatcher:

- ➔ **Place of incident**  
exact address and any directions to help in locating it, and in a sparsely populated area, a description of the access route.
- ➔ Brief **description of the incident**  
e.g. road accident, sudden illness, work accident, general condition of the affected person (conscious, unconscious)
- ➔ **Other hazards**  
e.g. leaking gas, other flammable liquids, damaged power grid, uncontrolled open fire, aggressive pets.
- ➔ Number of casualties, age, gender, general condition (brief description of what you observe about the casualty).
- ➔ **Details of the person calling for help**  
their own name and any form of contact if necessary (telephone number).

# Most frequent circumstances of medical rescue team calls

Statistically, both the age and gender of the patient are significantly related to the general and specific diagnosis in the most frequent medical rescue team calls.

The available publications indicated that emergency medical team interventions occurred with similar frequency in both sexes, but were slightly more frequent in women than in men - 52% and 48% respectively.

The highest proportion of all MRT interventions involved patients aged over 70 years.

The significant causes that require the intervention of medical rescue teams can be divided into four groups:

## 1 Sudden threat to life and health:

Stroke, myocardial infarction, loss of consciousness, sudden acute chest pain, cardiac arrhythmia, syncope, convulsions, increased dyspnoea, sudden acute abdominal pain, massive haemorrhage, poisoning and acute and severe allergic reactions.

## 2 Injuries and wounds:

Extensive wound resulting from trauma, limb and spinal injuries preventing independent movement, extensive burns, heat stroke, electrocution, submersion or drowning, hypothermia.

## 3 Morbidity:

Sudden, painful exacerbation of cancer and other chronic diseases.  
Sudden, acute infections.

## 4 Emergencies requiring medical intervention:

Aggression due to mental illness, suicide attempt, fall from a height, severe traffic accidents.

Among the above groups, the most frequently recorded detailed **symptoms and syndromes** that are the reason for an ambulance call and intervention include:

<p><b>Sudden threat to life and health due to cardiovascular diseases</b></p>	<p>including mainly myocardial infarction, chest pain, cardiac arrhythmia - these are the most frequently recorded reasons for dispatching MRT. Cardiac disorders, according to current research, account for about 20% of medical interventions in Poland. Similar statistics are found in other developed countries. The frequency of calls due to cardiovascular disorders is low in the group of children, adolescents and adults up to the age of 35, and then increases rapidly to reach its apogee in people over 70.</p>
<p><b>Injuries and poisoning</b></p>	<p>another group of incidents, representing around 20% of MRT calls. In this case, there is a high correlation with the age and gender of the patients. The calls concern mainly men (60%). The highest proportion of injuries and poisonings – 50% – was recorded among patients in the age group 10-19 years.</p>
<p><b>Morbidity</b></p>	<p>Medical rescue team interventions resulting from a sudden exacerbation of cancer or another chronic disease are not as frequent as those listed above, but their incidence is increasing rapidly. This is probably a consequence of more difficult access to doctors and the reliance on MRTs instead of other sources of medical assistance. This type of intervention mainly affects patients in older age groups.</p>
<p><b>Life and health emergencies due to diseases of the gastrointestinal tract (about 12%)</b></p>	<p>are, apart from trauma, the most frequently recorded reasons for dispatching MRT to paediatric patients. They account for more than half of the patients intervening for this reason.</p>
<p><b>Loss of consciousness, convulsions and disorders of consciousness</b></p>	<p>are the diagnoses responsible for about 9% of the calls, but together with calls to trauma, these are the most common type of diagnosis, being the reason for the intervention of MRT outside the patients' place of residence and stay. It is worth noting that calls for this reason, are often later recorded as a symptom of another medical diagnosis.</p>
<p><b>Sudden threat to life and health due to diseases of the respiratory system (about 10%)</b></p>	<p>including respiratory disorders, dyspnoea, constitute a group of ailments whose frequency of occurrence is strongly correlated with the season of the year and periods of increased incidence of infections. As a reason for the intervention of MRT, they most often affect patients in the youngest and oldest age groups.</p>

# Reasons for unjustified MRT trips

Unjustified use of the emergency medical services system by patients with non-life-threatening medical problems is a common phenomenon that occurs worldwide.

**An unwarranted call** is one that does not involve a health emergency or an immediate threat to life. The word “**urgent**” is of primary importance in this case.

Nevertheless, the belief persists in society that there are no unjustified visits of the emergency medical services and everyone has the right to call an ambulance to their home.

An unjustified call to the emergency medical team, i.e. calling an ambulance in situations that do not pose a threat to life or health, is an offence.

**This is punishable by arrest, restriction of liberty or a fine of up to PLN 1,500.**

**The medical dispatcher** may refuse to arrive by ambulance if he or she feels that there is no need to intervene and may instead recommend that the patient go to the PCP or Night Medical Care.

However, it is important to be aware that the State Emergency Medical Services Act does not give the medical dispatcher the power to effectively oblige medical personnel outside the emergency system to intervene.

The use of the resources of the Medical Rescue Teams is increasingly being used premeditatedly by patients without a medical emergency in order to circumvent the obstacles and systemic inadequacies of healthcare in Poland.

Unjustified call-outs put a strain on the medical rescue team that may be needed in emergency situations, resulting in longer arrival and medical aid delivery times for those in serious need of urgent intervention.

Unfounded calls generate unnecessary costs for the healthcare system.

According to Ministry of Health data for 2023, **more than 1.89 million ambulance trips** were assessed as non-emergency interventions by ambulance team leaders, accounting for **58 per cent**, of all team trips.

**Approximately 32 per cent** of calls directed to the control room, either directly from 999 or diverted by 112 operators, do not result in the dispatch of a medical rescue team.

Work and research on unjustified medical rescue team calls is subject to a high risk of error, but statistically significant correlations can be identified – that is, factors such as the location of the scene, the mode of the trip (**in code 1 “urgent” and code 2 “ordinary”**), the gender and age of the patient, and the month and time of the call.

The main causes of unjustified ambulance calls can be divided into:

-  Calls relating to conditions that require medical intervention but are non-emergency in nature, where there is no significant deterioration of health and/or life-threatening condition.
-  Calls that do not require emergency or medical intervention - such as applying a dressing, providing intravenous access, performing an ECG, immobilising limbs, applying an orthopaedic collar, etc. mostly concern patients with chronic diseases whose health condition has not changed, wishing to continue therapies started earlier, during hospitalisation or during primary care treatment. This group also includes patients with minor injuries, cuts, bruises, low intensity pains, calls for infections with low temperature, etc.
-  Ambulance calls in situations where a telephone consultation with a doctor or an appointment with a PCP or OPD (specialised outpatient healthcare) doctor is sufficient, but the patient is unable or unwilling to make it – this group includes calls for MRT due to difficult access to a PCP or OPD doctor. Reasons for this are, for example, long distances from the place of residence to health centres, queues to doctors, particular periods of the calendar year – such as Christmas, extended holiday weekends or holidays. This group may include situations where the call for an ambulance involves a request for transport to hospital, often to fulfil a referral already in hand, but does not involve any significant deterioration in health requiring the intervention of MRT.
-  Calls for conditions that do not require medical intervention that result from non-medical reasons, most often social, due to loneliness, need for attention, fear or ignorance, and misjudgement of the situation by a third party.
-  Calls resulting from the attitude of the medical dispatcher, concerning situations where the work of the dispatcher is of a precautionary nature (e.g. due to lack of sufficient experience or knowledge) or is the result of the medical dispatcher being misled by the caller (e.g. due to high levels of stress, exaggeration of certain symptoms, incorrect assessment of the situation by third parties, as well as intentional acts, calls by persons under the influence of alcohol or drugs, or 'malicious' calls).
-  Erroneous calls – emergency medical rescue services departures to incorrectly stated locations, or cases where patients left the scene before paramedics arrived.

**Measures that could reduce unjustified call-out, according to the State Medical Rescue system staff, include**

- **nationwide public information campaigns on calling MRT,**
- **better availability of PCPs,**
- **as well as more frequent information in first aid courses on when to call an ambulance.**

# First Aid principles

First Aid is a set of actions that are taken in the event of an accident, injury, sudden attack of illness, with the aim of protecting the health or life of the victim and minimising adverse effects until the arrival of the emergency services.

These are the basic actions that can save a life or reduce damage to health.

## Basic principles of first aid:

- ⊕ Ensuring safety:**  
Make sure the scene is safe for you and the casualty.
- ⊕ Assessing the situation:**  
Check what has happened and what the danger is.
- ⊕ Calling for help:**  
Call the emergency number 112 or 999, 998, 997.
- ⊕ Assessing the casualty:**  
Check if the casualty is conscious and breathing and if they have any injuries.

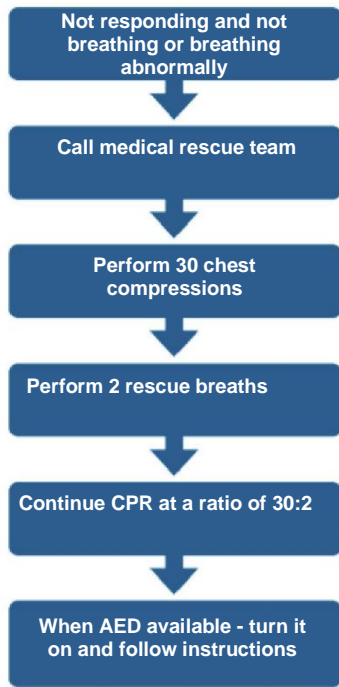
## Perform rescue action to the best of your knowledge and ability:

<b>Stop the bleeding</b>	Apply pressure to the wound, apply a dressing
<b>Ensure the airway is ventilated</b>	Place the casualty's body in a position that facilitates breathing
<b>Cardiopulmonary resuscitation (CPR)</b>	If the casualty is not breathing call another person to help if possible and perform CPR (chest compressions and artificial respiration). <b>30:2 – adult, child 5 rescue breaths, 15 compressions, 2 breaths 15:2, newborn 5;15:2</b>

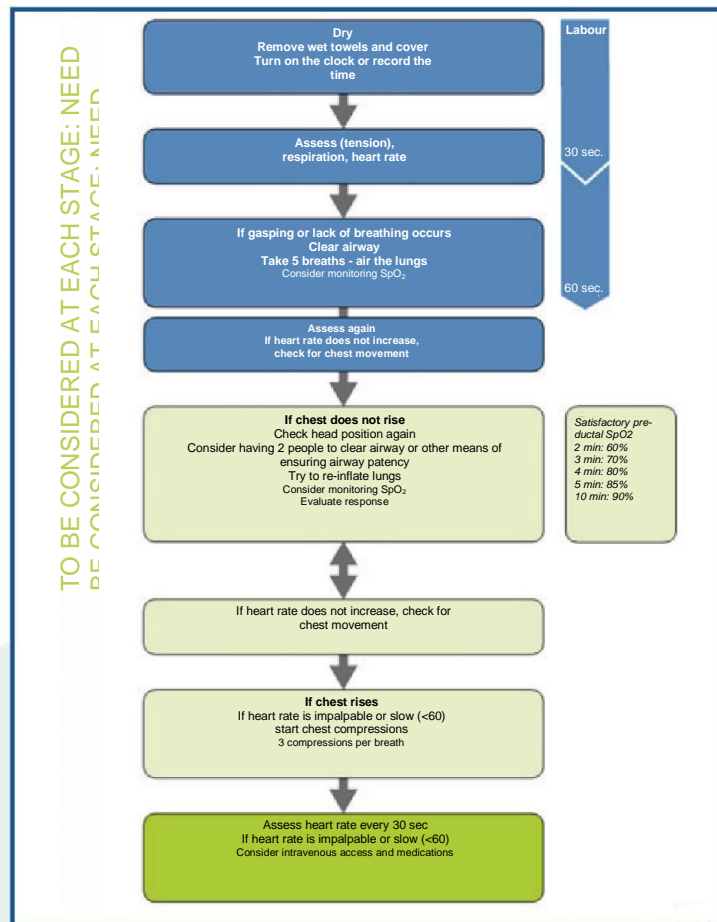
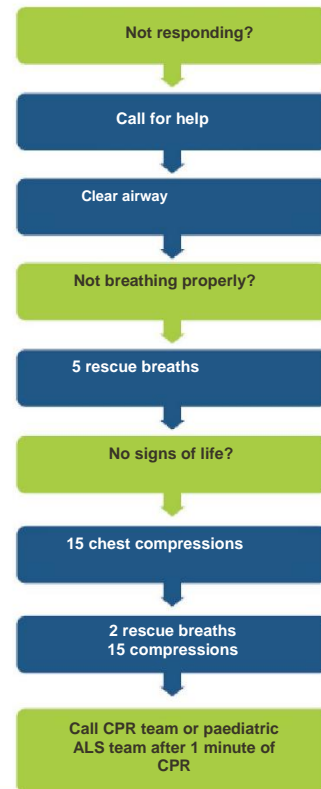
Check the area if **an AED is available.**

Incorporate the available AED into the rescue procedures as soon as possible!!!  
When carrying out CPR, strictly follow the BLS procedure algorithm

## BASIC RESUSCITATION TREATMENTS IN ADULTS



## Basic resuscitation procedures in children



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