

AN EASY FIRST AID MANUAL FOR THE HORECA SECTOR

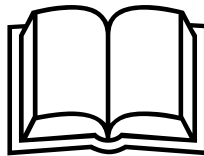
Updated according to the 2015 international guidelines



A handbook edited by The Bilateral Agency of Tourism (EBT) of the Province of Venice

First Aid is defined as the helping behaviours and the initial care provided for an acute illness or injury. First aid can be initiated by anyone in any situation.

European Resuscitation Council (ERC) 2015



This manual is the result of a joint effort:

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THE LAW - THE HISTORICAL DEVELOPMENT OF THE LEGISLATION

The law No. 80 of 1898, the first law for occupational safety in Italy, established the obligation to adopt a corporate first aid service for the manufacturing companies.

At first it was established that under the provision of the law the organization of a first aid service should be mandatory only for injuries in the workplaces of the construction sector and in industrial companies.

After the Second World War a new law established that a first aid service at work should be granted also in non manufacturing companies, both for injuries and malaises (Presidential Decree No. 303/1956).

Our national legislation, as well as that of the European Union, entrusts the employer with the task to provide the training of a sufficient number of lay workers (first aid attendants) in order to guarantee a proper first aid at work.

Employers also have the obligation to establish the necessary connections of the workplace with the medical emergency service 118, that is effective in Italy since 1992 (this obligation is stated by the "Testo Unico", Unique Text on health and safety, Decree n. 81/2008).

The law also establishes that when setting up the first aid service the employer must take into account "any other people present at workplace" (see "Testo Unico", article 45). In hotels and restaurants the presence of non-working people (such as customers, visitors, clients etc.) is fairly constant and consequently this aspect of the legislation is of a particular relevance.

The assistance to non-working people must be primarily an emergency service, e.g. the practice of early resuscitation in cases of cardiac arrest or some other emergency interventions waiting for the arrival of the specialized personnel of the 118.

An important aspect to be taken into consideration is that in so many years that the law for the first aid services at workplace is in force there have not been any cases of criminal or civil involvement of first aid attendants.

The prosecutors and the judges of the labour courts have apparently always kept in mind "who the first aid attendants are", i.e. ordinary workers who, due to their appointment by the employer, give their help when circumstances require it. For first aid attendants' tort or criminal liability for negligence, malpractice or carelessness can be assumed only in case of failure to assist or when they make interventions which they weren't trained for.

We can take as an example the tourniquets which can be used for bleeding: if the first aid assistants didn't receive a specific training to apply them, they shouldn't use them. In the framework of the training courses it is also explained that first aid attendants should never administer drugs and this rule must of course be respected.

A good physical fitness is required to perform the first aid service, because some activities, as the chest compressions or some manoeuvres to clear the airways in case of obstruction by foreign bodies can be done well only having a sound cardio-respiratory efficiency and a fit musculoskeletal system.

The first aid assistant requires above all a good psychological and emotional equilibrium, the "ability to be able to "listen" what other people are feeling, a strong willingness to help and a good emotional participation¹.

THE RISK ASSESSMENT PROCESS

The risk assessment process is an essential part of the organisation of first aid, as it is for many other aspects of prevention/protection in the workplaces.

By the analysis of occupational risks, the employer, with the collaboration of the competent physician if appointed, can prepare and maintain a valid first aid corporate service. It can be helpful to answer questions like those below:

- Which are the most common injury types at our workplaces?
- Which accidents occurred to workers, customers, visitors ?
- Which were the more serious accidents ?

¹ This is the empathy (the ability to understand and share the feelings of another, see Lancet Neurology volume 12, 2013, page 336).

- The work involves special risks, such as difficult environments (e.g. work at height) or where personal protective equipment is required (exposure to dangerous chemicals, high levels of noise etc.)?
- How many people are involved in the work and what is their age distribution?
- There are external people (customers, visitors) who access the workplaces and what is their number?
- There are employees whose work shifts include late evenings/nights, overtime work, temporary workers?
- There are inexperienced workers and/or employees with disabilities?
- The staff includes workers who must travel a lot, who are working in remote locations or alone?

HOW THE FIRST AID ATTENDANTS SHOULD BEHAVE IN CASE OF INJURY OR MALAISE

We begin this section with a short glossary where a few good definitions are given for a better understanding.

WORK INJURY: a sudden adverse occurrence which results in an injury to a worker, a trauma, usually physical, but also psychological², which occurs in a very short time frame.

MALAISE: sudden loss of the well-being in a time frame that isn't necessarily short.

MEDICAL EMERGENCY comes about when one or more vital parameters are seriously compromised – Consciousness – Breathing – Circulation- and the casualty is in serious danger and therefore an immediate action is required.

MEDICAL URGENCY comes about when we can sense a condition of menace to life even though consciousness, breathing and heart activity are not seriously compromised (e.g. a sharp chest pain, copious bleeding, a sudden heavy headache, the outbreak of a sudden hindrance to one's movements etc.).

PERCEPTION OF DISEASE SEVERITY: it is what combines both the situations of medical emergency and those of medical urgency. We understand that we are facing dangerous situations and we must set in motion the rescue chain, that is to call the service 118.

SYMPTOM: it is what the casualty feels, e.g. health troubles, pains, etc.

SIGN: it is what we can see observing the casualty (pallor, agitation, sudden difficulties on walking etc.).

THE FOUR VERBS OF FIRST AID

First aid is a part of the emergency plan that the companies of all sectors must keep constantly "ready to be enforced" when circumstances require it ; companies/ societies of the Horeca sector often have a specific written procedure which regulates the activities of first aid in their context; there are always some subsequent operational phases .

² As it can be after a violent occurrence, such as an armed robbery.

The French Institute INRS, Institute National de Recherche et de Sécurité, took four verbs as keywords: **to protect / protect oneself, then to examine and soon after to put on the alert the medical emergency service 118 and/or to assist.**

We adopted the outlines of Inrs as our reference.

1. PROTECT/PROTECT YOURSELF

The first phase is protection, because if safe conditions are not in place we face serious risks. When there are big menaces to safety (e.g. fire, risk of explosions, electrical hazards, risks of collapse of buildings, dangerous atmospheres) first aid attendants must refrain from intervening; they have just to put on the alert the services in charge of civil defense through the company managers (the employer or her/his delegates).

In exceptional cases we must take away one or more casualties from the place where they are: this is something we do only to rescue people from a life threatening situation which isn't possible to control.

THE CASUALTY'S (CASUALTIES') EMERGENCY DISPLACEMENT

Before moving a person from a hazardous area, it is necessary to consider both the path you must follow to reach a safe area and the casualty's physical conditions (e.g. if he can walk or not), taking into consideration the possible need to be helped.

The displacement is done by keeping the person in the supine position, ideally placing the person on a coat or a rug, etc., that will be dragged to the safe zone.

If we don't have the useful tools, the casualty must be moved by dragging her feet or if there are injuries to limbs by pulling her shoulders.

Whatever is the displacement method, the grip height must be always just a few centimeters from the ground. It is important to take into consideration the person's weight and the way, considering the need to ask for help

2. TO EXAMINE

If the environmental conditions are safe, we can start to examine. To examine in this context means to understand what kind of health problems we are facing and what can be done, how we can give assistance and avoid the worst. It means also to collect useful information, to ask, listen, watch in order to ascertain the seriousness of the

casualty's malaise/injury, to be able to take the most appropriate measures, to feed the operators of 118 with proper information so that they can well organize their interventions.

3. TO PUT ON THE ALERT THE MEDICAL EMERGENCY SERVICE

A key aspect of a proper first aid service in workplaces is to ensure the timeliness and appropriateness of specialized interventions. When the first aid attendants are aware of the seriousness of the situation they are facing, the first thing of which to make use is the telephone. The wide availability of mobile phones makes it quite easy today to be connected with the 118 , whose service is 24/7 on the whole Country.

The 118 operator follows a standard procedure according to which he asks a series of questions in order to identify immediately the most serious cases.

The person who calls must then

- Remain calm
- Let himself be guided by the 118 operator
- Answer the questions clearly
- Hold the line until he is told to disconnect

To make an efficient call it is required:

- To tell the name and surname of the person who is calling and the address of the place where he is calling from (worksite, house address, street). If there are different ways to go in (as it is in large worksites), it must be explained which is the nearest point to get in.
- It must be given a clear description of what happened: the number of people involved and their health conditions (with particular reference to the consciousness, the presence of autonomous breathing and any other relevant symptom or sign).
- We have also to tell if there is any special condition that may require the assistance of other Relief Agencies (fire, acts of violence etc.) and to describe the measures taken by the first aid Attendant(s).
- The phone number from which we are calling (we mustn't make any other calls with this telephone until the arrival of the rescue professional operators!).

We have to hang up only upon request of the 118 staff

Given that in the most serious cases an immediate action is required, the call is generally made by people on the site at the moment of the emergencies.

The proper way to call 118 should be known by all the workers (they can be made aware with short meetings or simple posters ,as the one of the image below).

It is also important to know in advance the average time for the arrival of the personnel of 118. This information is essential for the proper management of the most serious cases, such as cardiac arrest.

THE CALL TO THE 118 (IN ITALIAN)

Dove?

Indicare il luogo dell'incidente

Quali?

lesioni o disturbi

Cosa?

è successo e quando

Chi?

chiede aiuto (nome),
dove (luogo), possibilità
di richiamata da parte
dei soccorritori (telefono)

Quanti?

sono i feriti



**CHIAMATA
DI SOCCORSO**

4. TO ASSIST

The assistance given by the first aid attendants is surely very important to ensure a quick and reliable connection with the service 118. It can be more effective in cases when they give assistance to the casualties even without medical devices.

The most relevant circumstances with reference to this are (among others):

- the cardiac massage in case of a cardiac arrest
- the opening of the airways for unconscious casualties
- the Heimlich manoeuvre when foreign bodies completely close the airways
- tight compression on heavily bleeding injuries.

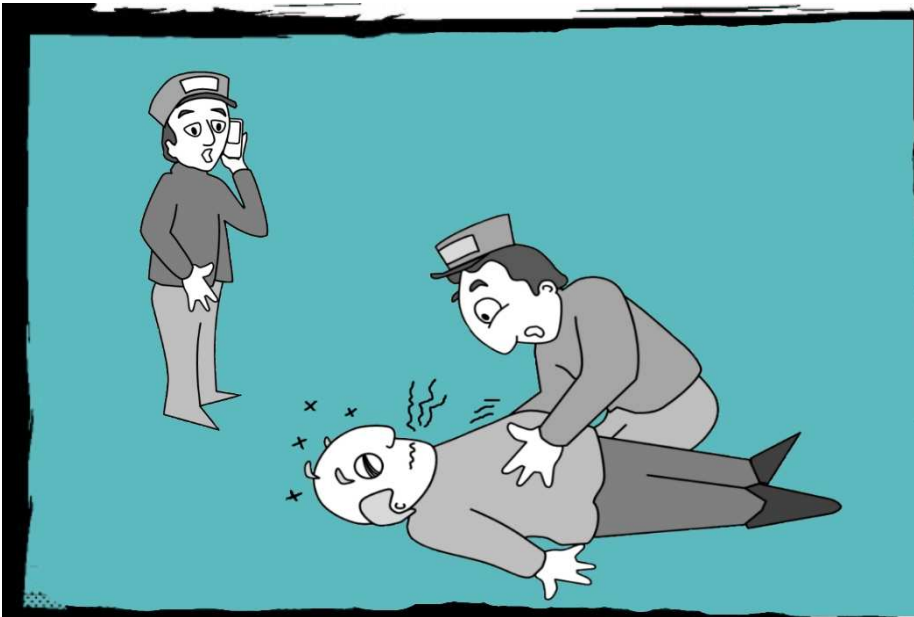
THE EIGHT SCENARIOS

In the guidebook written by the French physicians of the INRS the different situations the first aiders can face are those of eight main scenarios³. We took their classification as a reference and we illustrate it here below; in our opinion it is valid, clear and simple.



³ Scenarios can overlap and /or follow one after the other (e.g. scenario n.5 heavy bleeding together with scenario n. 7, a pain that hampers movements; scenario n.3 choking can give rise to scenario n.2 , the victim is unconscious and not breathing).

SCENARIO N.1 THE CASUALTY IS UNCONSCIOUS BUT SHE/HE BREATHS



TO ESTABLISH THAT THE CASUALTY IS UNCONSCIOUS AND TO CHECK BREATHING

In front of a lifeless casualty we must examine immediately these vital functions:

- the consciousness
- the breathing

An unconscious casualty is immovable and unresponsive both to verbal and physical stimulation; the unconsciousness may occur suddenly or come about gradually .

When we establish that the person is unconscious and breathing we know that it is not necessary to provide the cardiopulmonary resuscitation.

We have to take into full consideration that unconsciousness is a condition of medical emergency, which requires an immediate call to 118 and that we must be ready to do what is necessary.

If the unconsciousness doesn't work out for the best almost immediately, as it is in case of fainting, the tongue may fall to the back of the throat and block the airway; the airway should be opened (with the manoeuvre airways opening, at page 14).

If the person remains unconscious airway efficiency should be carefully kept placing the casualty on the recovery position, **unless there is evidence or suspicion of a trauma of the neck, back, hips or pelvis.**

WHAT WE HAVE TO DO

If the person is unconscious and breathing we must firstly take care to avoid airway obstruction, which is caused, if the casualty is in a supine position, mainly by the backwards fall of the tongue (the prone position allows the passage of the air along the respiratory tract, instead).

The causes of loss of consciousness include traumas (falls from height etc.), which can crack the spine or the skull. If a casualty is found lying unconscious the first aider must avoid risky movements of the casualty and most of the times the advice given by the 118 personnel during the call is very important to apply.

HOW TO CHECK CONSCIOUSNESS AND BREATHING

We assess consciousness by calling the person loudly, squeezing at the same time the neck muscles. During this manoeuvre, we also try to assess the presence of effective breathing, noting in particular the possible movements of the chest and/or abdomen every two minutes, listening to noises caused by the presence of breathing and feeling on our face any airflow out of the nose or the mouth (this phase is called "Look, Listen and Feel"). The check of breathing must be carried out within 10 seconds. If, within this time limit, we aren't able to ascertain the casualty's breathing, we have to behave as in the case of a person who is not breathing; after turning the casualty into the supine position (if it is not already in this position), we begin the resuscitation manoeuvres. Any muscle twitching or spastic gasps (gasping), which are often associated with the first moments of a cardiac arrest, should not mislead; we must immediately get in touch with the 118.

Pay attention: a call to 118 must be always done as soon as unconsciousness is ascertained!

A PERSON WHO BECAME UNCONSCIOUS DUE TO THE WORSENING OF HIS HEALTH CONDITIONS

If the casualty becomes unconscious due to the worsening of a previous health problem, the first aider will put him in the recovery position (see below). If the casualty doesn't feel neck, back or hips pains before he becomes unconscious, the risk of injuries to the spine is very small.

The rescuers will place the casualty into the recovery position and continually monitor breathing every 2 minutes, until the arrival of the 118 personnel.

If breathing ceases, the person is turned into the supine position to begin resuscitation. Immediate notice of the worsened conditions of the casualty must be given to the 118 personnel.

THE RECOVERY POSITION

We must always keep in mind that the casualty is not collaborative, so even moving a person of a slight build may cause injuries to the rescuer. We must take always into consideration if it is possible to get help.

If a casualty is unconscious and breathing and is in a supine position, if we don't suspect any spinal injury, we can turn her on her left side (the preferred side) as follows:

- the rescuer kneels on the floor to the left side of the person
- he places the casualty's arm closest to her at a right angle to his body
- he raises the knee farther from her, keeping the casualty's foot at the floor
- he raises the victim's other arm, keeping her palm below the victim's opposite cheek
- holding the casualty's right arm with his hand, the rescuer grabs the victim's knee up and turns the casualty towards the left side
- Finally he stabilizes the victim's position supporting the knee and placing the head with the chin pointing downwards and the mouth slightly open.

(Airways Opening: the rescuer places one hand on the casualty's head, with the other hand under the casualty's chin. He gently moves the head backward lifting the victim's chin and then opens her mouth).

- It may be useful to put something under the casualty's mouth (such as a sheet or blankets or a plastic bag, a tissue etc.) to allow the easy removal of saliva or vomit.

If it takes much time for the arrival of the personnel of the 118, we must consider turning the casualty on the other side after half an hour, placing her firstly in a supine position; placing the casualty into the supine position we keep one hand under the back of the neck to avoid that it can knock against the floor.

The recovery position is also practiced at the end of the epileptic seizures and whenever you need necessarily to go away while a casualty is still in serious health conditions (if we don't suspect a trauma to the spine).

HIGH RISKS OF INJURY TO THE SPINE

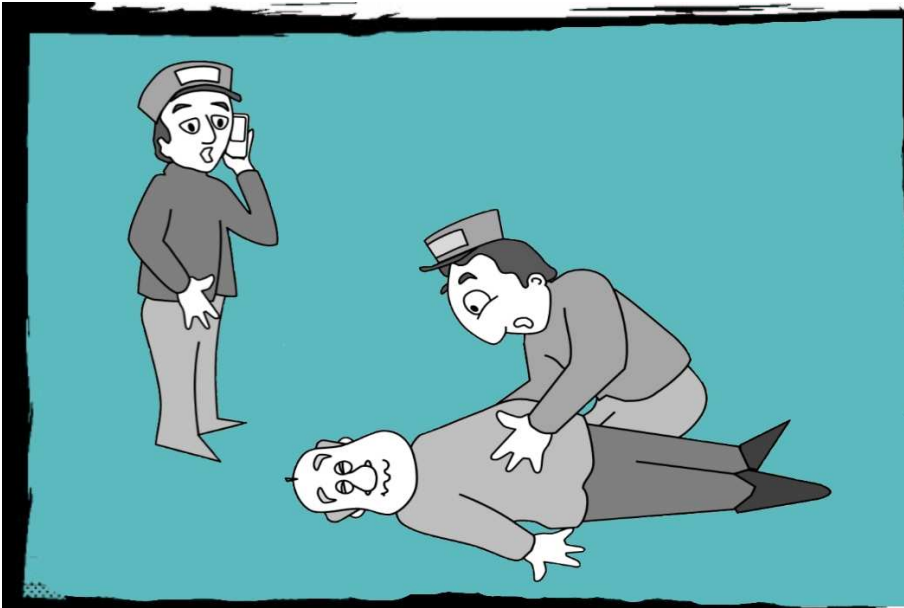
If the victim is already unconscious at the time of our intervention or she is complaining of back pain, numbness, neck and/or limbs pain and or she was in a daze before becoming unconscious, we have to suspect a trauma to the spine or the head and then proceed with due caution. What we can see, together with the information gathered from witnesses or provided by the casualty herself before becoming unconscious, will help us to confirm our doubts.

In such cases placing the casualty into the recovery position is very dangerous, because fragments of fractured vertebral bones can damage the spinal cord.

It is essential to get the advice of the 118 personnel and apply procedures.

It is possible that the 118 operators suggest to practice the airway opening only, the same with due caution: the rescuer gets behind the casualty's head, putting the elbows at ground level, he puts his hands around the casualty's neck and slowly, gently, avoiding abrupt movements of the casualty's head, pushes her chin upward.

SCENARIO N 2 THE CASUALTY IS UNRESPONSIVE AND NOT BREATHING



The evaluation of consciousness is immediately followed by the assessment of breathing; this should always be a very rapid intervention, not to lose precious time! If the casualty is unconscious and not breathing, then it is a cardiac arrest.

WATCH OUT! In the first minutes after a cardiac arrest, some noises can come from the casualty's airways, even strong ones; these noises are not breathing, they are instead gasps; at this time the resuscitation manoeuvres must be applied immediately. Sudden cardiac arrest occurs mainly due to heart problems and in many cases it follows a heart attack.

The closure of airways due to obstruction by foreign bodies, drowning⁴, the swelling of the larynx in case of severe allergic reactions or a severe lack of oxygen in the environment can also lead to a cardiac arrest.

Whatever the causes, when we are facing a cardiac arrest we must immediately alert the 118 personnel and delay brain damage due to lack of oxygen while practicing **immediately** the cardiac massage .

⁴In case of a cardiac arrest due to asphyxia (lack of oxygen), overdose from opiates or cardiac arrest in children (for whom actually asphyxia is the first cause of cardiac arrest) it is particularly useful to make together chest compressions and rescue breaths; in case of resuscitation after drowning, rescue breaths are the first manoeuvre (5 rescue breaths) and then the ordinary cycle (30 chest compressions and 2 rescue breaths) will follow.

The 2015 international Guidelines as the previous ones recommend that chest compressions be followed by rescue breaths, if the rescuer is able to perform them; the ordinary cycle is 30 chest compressions and then 2 rescue breaths, everyone lasting one second. We have to make so that the chest compressions are not interrupted more than 10 seconds.

Our experience shows that at workplaces of Horeca rescue breaths are not well accepted by first aid workers. Safe, reliable and easy to use protective devices are the ventilation barriers (such as Life Aid), which many emergency services 118 use also in their training courses.

In our opinion these ventilation barriers are better for our workplaces than the portable ventilation masks (Pocket Masks), which must be taken out from their hard shells and then must be expanded and properly positioned.

At the worksites where there are many employees or many customers and visitors the semi-automatic defibrillator (AED) is a device especially needed.

This device, once switched on, is very easy to use: it guides the operator in delivering an electric shock.

This instrument, once lit, vocally guides the rescuer during all phases of application of electrodes, evaluation of the cardiac rhythm and the delivery of the electric shock if needed.

Often there is also a selectable voice guidance that helps the rescuer to recall the procedures for a proper resuscitation "hands only".

In Italy the Defibrillator can be used by first aiders at work when trained and licensed by the 118 or other entitled agencies.

RESUSCITATION MANOEUVRES

Time is very important in such a scenario: if nothing is done, the first brain damage comes about within minutes after a cardiac arrest and becomes irreversible in about 10 minutes. We must therefore act immediately and continuously, until the arrival of qualified rescuers (the 118 or trained people equipped with the defibrillator) or until we are overcome by exhaustion or the casualty recovers. The presence of a second rescuer who knows the manoeuvres and who can take over is a very favorable opportunity, because it allows to lengthen the manoeuvres of an effective resuscitation. If the manoeuvres are successful and the casualty recovers, the person must be placed into the recovery position.

THE CONTROL OF CONSCIOUSNESS AND BREATHING

The control is carried out according to the timing and the procedures described in the previous scenario. In the absence of consciousness and breathing the 118 personnel should be called immediately and the casualty must be grounded in the supine position.

THE SUPINE POSITION

The rescuer puts himself at the casualty's side, extending up the arm closest to him. Grabbing the victim's shoulder and hip furthest him, he turns the casualty towards himself, rotating the victim on her side. When moving the victim, he accompanies her head with a hand to avoid blows to the victim's head due to knocking against the floor. After placing the person into a supine position, he aligns arms and legs .

CHEST COMPRESSIONS FOR ADULTS AND CHILDREN OVER 1 YEAR OLD

- We have to kneel beside the casualty and place the palm of one hand in the centre of the sternum;
- we then place the other hand on top of the first, intertwining our fingers, so that only wrists are in contact with the sternum whilst palms and fingers are slightly raised and an undue pressure is not applied on the ribs;
- the rescuer's arms must be extended and perpendicular to the casualty's body; his shoulders must be above the sternum, the back has to be straight and stiff, the knees must be well opened
- we must press hard the sternum to 5-6 cm with a frequency of 100 up to 120 compressions per minute. Compression and relaxation must have the same length
- compressions should never be interrupted and must continue also when applying the AED plates and while charging the device before any electric discharge.

CHEST COMPRESSIONS IN INFANTS (CHILDREN OF LESS THAN ONE YEAR)

- Compressions are given with three fingers, at the centre of the sternum
- the frequency is between 100 and 120 compressions per minute, the depth must be about 4 cm.

- **SCENARIO 3. THE CASUALTY IS CHOKING**



This may occur when people eat and the food goes down a wrong passage. Such cases happen with meat or chicken, but also other kinds of food and objects can cause choking, especially in children, who put so many things into their mouths. Dentures can also cause airway obstruction to the elderly.

If the casualty speaks and breathes normally, the foreign body is not in the respiratory tract; then there isn't an emergency situation; it is proper to make the victim drink some water and at the same time check that there are no symptoms of early injuries of the digestive tract (burning, pain in the throat or behind the sternum).

If the foreign body is in the respiratory tract, the casualty coughs and we encourage her to go on; we don't have to do any manoeuvre!

If the casualty stops coughing and the foreign body is not expelled, if she is no longer able to speak or breath (lips may become purplish blue), then it is necessary to intervene and clear the airways.

CLEARING OF THE AIRWAYS

In the first moments when the casualty is still able to cough, the rescuer must simply stand beside the victim, inviting her to lean forward and to cough, and looking at her face to detect if any sign of complete obstruction of the airway starts to appear (very difficult breathing, purple blue lips).

Only if the signs of a complete obstruction appear we must apply a sequence of 5 back blows followed by 5 abdominal or thoracic compressions (see below), observing every time if the casualty was able to spit out the object that caused the choking.

The manoeuvres must go on until the choking is over or the casualty becomes unconscious or the specialized emergency team 118 arrives.

WATCH OUT The casualty's health conditions can worsen quite quickly if the respiratory obstruction persists: the person can lose consciousness within minutes and a cardiac arrest can occur.

BACK BLOWS

Back blows must be given with the palm of our hand being careful not to hit the casualty's head

**WATCH OUT WE MUST ALWAYS ALERT THE 118 EMERGENCY SERVICE!
WE MUST CALL OR ASK TO CALL THE 118 BEFORE STARTING THESE
MANOEUVRES !!**

ABDOMINAL COMPRESSIONS

From behind the casualty, the rescuer puts his arms below those of the casualty and places the fist of one hand slightly above the person's navel.

To avoid damage to internal organs, the thumb must be closed inside the punch, then enclosing the fist with the other hand. Keeping his head sideways to the casualty (in order to see if the victim is spitting out the object and to avoid the risk of fractures of the nose caused by the jerking-back movements of the casualty's head), he makes vigorous compressions on the abdomen inward and upward ("spoon" manoeuvre). If the manoeuvres are successful, we must advise the casualty to undergo a medical check up to evaluate if the object has only moved and is therefore still present in the respiratory tract ; it is necessary also to assess if any damage to internal organs occurred.

If the casualty is very obese or is a pregnant woman, the compression point is moved from the abdomen to the centre of the sternum (chest compressions).

CLEARING OF THE AIRWAYS FOR SMALL CHILDREN AND INFANTS

For children and infants too it is recommended to provide the back blows as well as the Heimlich manoeuvre; we have to alternate the back blows and the Heimlich manoeuvre.

In children as well the airways obstruction can cause a sudden impossibility to breath , cough and make sounds. The baby may close his eyes and raise his hands to the throat and the chest.

CHILDREN' CHOCKING

If the child doesn't cough anymore and doesn't cry out we have immediately to call the 118; then we have to place the baby on our legs and give 5 back blows between the shoulders with the palm of the hand. The strong vibration can remove the object and give the baby the opportunity to breath normally again.

If this manoeuvre was not successful we have to perform the Heimlich manoeuvre; if the child's height requires it, it will be necessary to kneel to get a better position.

The 2015 European guidelines recommend to go on alternating back blows and abdominal compressions until the child starts coughing again, or he becomes unconscious or the specialized emergency service 118 arrives.

NEWBORN BABIES' (CHILDREN UNDER 1 YEAR) CHOKING

If the newborn baby doesn't cough anymore and doesn't cry out we have to call immediately the 118; then we place the baby on a forearm; the head is supported by one hand of the rescuer and a child's leg is blocked under an armpit of the rescuer.

Then we give five blows on the baby's back . If this manoeuvre is not successful, the baby is turned over and the rescuer gives 5 chest compressions, everyone of about one second, with two fingers placed at the centre of the sternum.



In this case too we go on alternating back blows and abdominal compressions until the baby doesn't start coughing again, or he becomes unconscious or the specialized emergency service 118 arrives.

WORSENING OF THE CASUALTY'S HEALTH CONDITIONS

If these manoeuvres are not effective, the airway obstruction causes a cardiac arrest. In this case the casualty must be placed immediately into the supine position. The 118 is immediately alerted and the resuscitation manoeuvres have to be performed straight away.

SCENARIO N. 4 THE SUDDEN ONSET OF A MALAISE



In the case of a malaise we must above all avoid the aggravation and get medical aid. In the classing of INRS in the image which symbolizes malaise is put a question mark. In many cases of malaise in fact it is not easy for a non-professional operator (and sometimes even for professionals) to have a clear perception of the seriousness of the medical condition of the person to whom we are giving assistance .

Consequently it is difficult to understand which is the most appropriate type of intervention. Questions like these below can be helpful:

What happened to you? Do you feel pain? Where do you feel pain? Apart from pain, have you got other health problems? Are you under treatment? In the past days have you had any health problems? Which ones? Have you recently been admitted to hospital? The rescuer will do a quick check to ascertain if there are

ONE OR MORE OF THE FOLLOWING SYMPTOMS:

- strong chest pain;
- strong abdominal pain;
- sudden feeling of cold not justified by the environmental temperature
- sudden decrease or complete loss of sight, unilateral or bilateral;

ONE OR MORE OF THE FOLLOWING SIGNS:

- difficult breathing
- abundant sweating without valid reasons and without high environmental temperatures
- loss/alteration of consciousness
- weakness or a sudden unilateral or bilateral paralysis of the face, arms or legs;
- sudden difficulty in speaking and/or in language comprehension;
- sudden, severe headache with no apparent cause;
- sudden loss of balance with unsteadiness or unexplained falls
- sudden paleness of the face (if the casualty has got a dark skin or is a black person, paleness can be evaluated on the inside of the lips)

It is important to establish whether or not there is the need to alert the public emergency service (118) or if we can handle the situation in the workplace, maybe with contact between the person and her doctor, just giving our assistance in holding the casualty in the most suitable position.

Nowadays mobile phones can be of great help in many situations: the casualty can speak with her doctor and receive relevant indications. **However if there are alarming symptoms/signs (i.e. PERCEPTION OF DISEASE SEVERITY⁵), the first aid assistants will always alert the 118.**

INTERVENTION PROCEDURES

Waiting for the arrival of the specialized medical personnel of 118, the first aid assistant will manage the victims' position in order to alleviate the discomfort.

THE SEMI-SITTING POSITION can make breathing easier and relieves chest pains. We start by making the victim sit on the ground and placing something as a support behind his back (e.g. using an overturned chair or supporting her from behind with our own body) in order to keep the person half-reclining, with an angle between trunk and legs of about 45°

THE SUPINE POSITION WITH BENT LEGS allows relaxation of the abdominal muscles. The casualty is made to lie down on the ground: the legs are bent, with the knees held up by placing a support (e.g. a blanket or a rolled up coat), so that feet are well placed on the floor.

⁵ See p.7

THE RECOVERY POSITION (already described) is also useful when we need to go away and a casualty is still in poor health conditions.

The rescuer must keep a careful supervision on the victim, especially looking out for those signs that may indicate a more or less rapid deterioration of the situation such as:

- deepening of an acute chest pain
- more intense headache
- sudden cold sweats which continue
- worsening of consciousness (e.g. from deterioration of consciousness to unconsciousness).

ACCOMPANYING THE VICTIM TO THE EMERGENCY SERVICE OF THE HOSPITAL

As soon as the rescuer can have the consent of the casualty and of the 118 personnel, he may accompany the person to the Emergency Department of the hospital with means provided by the company. During the journey to the hospital, it is useful to maintain the casualty's body temperature with a blanket or an isothermal sheet .

5 THE CASUALTY BLEEDS ABUNDANTLY



Bleeding is the leakage of blood from the vessels where normally it flows.

Large blood losses may result from injuries to blood vessels , especially arteries, in which blood flows with a greater pressure or may be also caused by wounds in the chest or the abdomen.

The blood may not appear outside because it remains within the body cavities, as in the case of injuries to the spleen after severe crashes of the thorax or abdomen (for example in car accidents).

When the blood loss is heavy, the victim is prostrate, pale, disoriented, we can see a true physical collapse (shock).

In case of bleeding, the important thing to do is to compress directly with force on the bleeding area itself.

There are only two exceptions to this rule, that is concussions and facial traumas.

In case of concussions the blood flowing from the nose and/or ears should not be stopped, because if blood remains inside the skull, it can severely squeeze the nerve cells.

In case of facial traumas if the casualty is on the ground, we must put him in a prone position to avoid the blood to accumulate within the sinuses, as it would happen due to the force of gravity if the casualty was lying supine and we compress the hemorrhagic area.

After a first quick cleansing of the wound, we have not to continue to pour water because if we keep the bodily areas which bleed under running water the blood crust (made by platelets and fibrin, a blood protein) cannot form.

WATCH OUT: even small wounds can cause abundant bleeding, if the casualty is under anticoagulant therapy (dicoumarol, heparin, new oral anticoagulants etc.); ask the casualty about it!

INTERVENTION PROCEDURES

With the exception of facial traumas and bleeding from the nose, a person with a severe bleeding should be placed in the supine position.

This position prevents the possibility of dangerous falls to the ground if the person collapses because of the heavy bleeding

We have to disinfect when the bleeding stops and recommend the person to verify what he must do about tetanus prevention.

If bleeding doesn't stop, if it concerns the face or genitals, you must alert the 118 → A SERIOUS SITUATION

Waiting for the arrival of the 118 personnel or managing the transport of the casualty to the hospital (if this is the advice of the 118) a blanket or an isothermal sheet can help to keep the casualty comfortable .

Although they are present in the first aid box, never use tourniquets to control bleeding because their use requires a specific training.

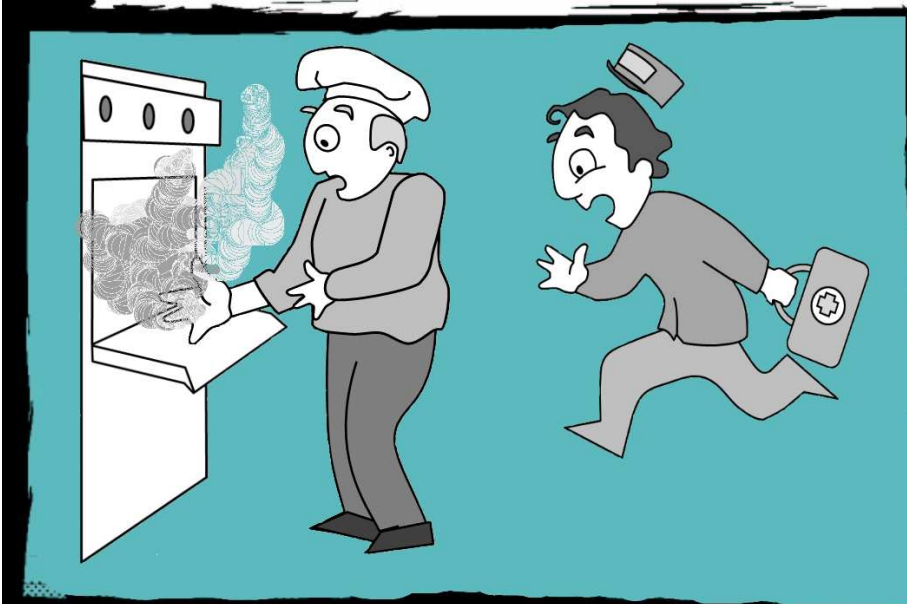
THE COMPRESSIVE BANDAGE

We have to strongly press against the wound with a bandage or a gauze; we can put gauzes one in top of the other. It is useful to use a self-adhesive elastic bandage that lets you adjust tension better than an ordinary bandage.

EPISTAXIS (NOSEBLEED)

In cases of epistaxis, blood loss should be interrupted by pressing the nostrils with a sterile gauze or a handkerchief, keeping the casualty's head downwards, so that the blood can go straight into the digestive tract and not into the respiratory tract.

SCENARIO 6. THE CASUALTY HAS BURNS



Burns are caused by chemicals with caustic or corrosive action, by electricity, by intense or prolonged exposure to sunlight, by hot water etc.

We have to put, as soon as possible, the burnt body areas under the water tap for at least 10 minutes.

Contrary to what happens in the case of bleeding, water is a powerful ally for burns: you should always use large quantities of cold water on the burned area of the body. While the temperature in the burnt area remains higher than 40° C burns continue to spread. **Never use ice or ice cold water on burns!**

In simple and general terms, first degree burns are red areas, those of second degree have blisters, those of third degree break and blacken the skin.

The severity of burns depends mainly on their extension!

If a large body area is affected (approximately a tenth of the total body surface), burns are severe.

In case of serious burns, the same as in case of severe bleeding, the casualty is prostrate and pale; a prolonged loss of consciousness (circulatory collapse, shock) can happen.

INTERVENTION PROCEDURES

Firstly we must reduce as much as possible the extension of the burns: the area should be placed as soon as possible under running water (tap water!) for at least 10 minutes or until the pain caused by burns is over. In case of cold burns we must avoid keeping the affected area under water more than 10 minutes, especially if the affected area is vast (more than 20% of the body).

For burns too there is a risk of contact with the casualty's body fluids and the rescuer must avoid this risk by wearing protective gloves.

The injured area is then protected from possible complications, first of all from infections; it should be covered with sterile gauze, held firm by a very loose bandage or with a sterile cloth (included in the first aid box). Bubbles which often appear as the result of burns should never be broken, they can easily infect.

We must alert the Emergency Service 118 if burns affect the face and genitals and if they are extended to more than 1/10 of the body surface regardless of the degree of burns.

Waiting for the arrival of the 118 personnel or during the journey to the hospital if we are directed to do so by the 118 personnel, the casualty must be in a supine position and we must continue checking the general health conditions of the casualty.

All electrical burns must be evaluated by a doctor.

Small burns can be effectively controlled with a kit for burns: these are envelopes containing 10 x 10 sterile gauze treated with a strongly hydrated gel and the addition of soothing herbal extracts.

These gauzes are not classified as pharmaceutical products and therefore can be part of the first aid box; they are particularly useful in environments such as kitchens and bars where there is a greater risk of small/medium-size burns.

In case of frostbites we must cover the affected body area with woollens or blankets or, if they are not available, with our own warm hands and take the person into a well warm place at once. **Frostbites require medical attention!**

SCENARIO 7. THE CASUALTY COMPLAINS ABOUT A PAIN THAT PREVENTS CERTAIN MOVEMENTS



This is the scenario that above all represents the injuries which can occur at workplace. In the tourism sector the most frequent type of injury are slips, trips and falls, which cause above all sprains and bruises. In these cases too it's important to understand what happened and the perception of gravity is again the most relevant aspect. Unlike malaises, there is the possibility to know more with the analysis of what happened and hearing what the casualty and witnesses have to say.

If the affected body area is the head or the chest or the back, the severity of the traumatic event is greater; in these cases there is no reason to move the casualty unless to save her from a serious and immediate danger.

We must always reassure the casualty and stay close to the casualty as we proceed to activate the emergency service 118.

Even when a limb is affected, we must avoid any movement of the affected part; it may be necessary to rely on our first aid box, where we have the ice, which is useful in case of limb injuries because it reduces the pain.

If we have a perception of gravity, we must alert the 118 promptly.

If the circumstances and the perception of a lesser degree of gravity allows us, we can decide, possibly asking the 118 operator for confirmation, to transport the casualty to the emergency service of the hospital, with a vehicle of the company or with an ambulance.

INTERVENTION PROCEDURES

Bruises and sprains cause pain and swelling, which can be controlled with cold therapy. In the first aid box there is ice ready to be used (and sometimes packed ice or ice spray): to prevent damage to the affected part, ice should never be put or sprayed on the skin (but we must always place a towel, a gauze, etc.) and not be kept on the affected area longer than twenty minutes.

Bandaging the affected area helps to limit movements and facilitates the recovery of the correct movements of joints. One must consider that the affected area tends to swell: in these cases bandaging with a self-adhesive elastic bandage may be more suitable than an ordinary hemmed bandage. In any case we have to check regularly if the downstream part of the dressing tends to cool down: in that case we must repeat the bandaging, which has become too tight due to the swelling of the injured part .

Cold therapy is also recommended in cases of muscle tears and, together with stretching, for muscle cramps ⁶.

In case of a limb trauma, we must always consider the possibility of a fracture. If there is a suspicion of limb fractures, we must try to block the movements of the affected limb in the position in which it is located, keep the injured area covered and alert the 118.

If after a trauma the casualty complains of a severe pain of the head, neck, back or pelvis and/or if we suspect fractures of the long bones of the limbs, we must ALERT the 118 personnel meanwhile keeping the casualty under observation.

⁶ The high temperature of some environments such as kitchens is a risk factor for the occurrence of muscular cramps, due to loss of mineral salts; in these cases to getting people away from the workplace and making them drink rehydration solutions can help to abate cramps.

SCENARIO 8. THE CASUALTY HAS A WOUND THAT DOESN'T BLEED MUCH

When bleeding from a wound is not abundant, we focus on cleansing and disinfecting. Disinfecting wounds aims to remove all devitalized tissue and isolate the wound itself from the surrounding environment to avoid infections.

Disinfectants should never be used if wounds are near the eyes or the ears. If the disinfectant is inadvertently poured into the eyes or the ears we must promptly spray water to avoid adverse effects.

The recommended disinfectant at workplace is the povidone-iodine (betadine; it is always in the first aid box).

Its use should be avoided in individuals allergic to iodine and in pregnant women.

Oxygen peroxide too is a good disinfectant and a reliable substitute

With regard to the first aiders' protection it must be borne in mind, as we said, that for small wounds it is better if everyone treats them by himself, in order to avoid the risk of contamination with someone else's blood.

INTERVENTION PROCEDURES

We must expose the wound by cutting garments clean the wound with water or saline solution and disinfect. In the first aid box is often present, besides the Betadine, hydrogen peroxide for disinfection: use gauze, not cotton wool.

Depending on the size of the wound, a medicated plaster can be applied or a sterile gauze as well, held in place with pieces of tape.

Check that all sides of the dressing are tightly closed to reduce the risk of infections.

Recommend the casualty to verify what needs to be done for prevention of tetanus.

THE RESCUE CHAIN, FROM THE WORKPLACE TO PUBLIC EMERGENCY SERVICES

FROM THE WORKPLACE TO THE 118 - WHEN AND HOW TO MAKE AN ALERT TO THE 118

Once the employer has appointed the employees to be first aid attendants and the appointed workers have completed their training and received the necessary equipment, we can say that in fact the company's first aid service is working properly. Our legislation does not determine the number of first aid attendants that companies must have; it only indicates that their number must be "sufficient" and it is then clear that if there is shift work, taking also into consideration holidays, sick leaves etc., the appointment of more than one first aider is always necessary.

First aid assistants' activities are coordinated by the competent doctor, if as it almost always happens in the tourism sector a competent doctor is appointed; otherwise first aid assistants must follow the guidelines given by public health authorities, such as Spisal of the local health units and the Ministry of Health ⁷.

The first aid box is the first aid attendants' bag with the tools of the trade; they can use only what is inside (excluding tourniquets); anything else, such as any type of drugs, shouldn't be used.

As we have said repeatedly, the main reference for first aid attendants is the 118 emergency service.

We must alert the 118 health emergency service if we are facing an unconscious casualty, if there is a very severe hemorrhage, an acute thoracic pain, if there was a fall from height etc., in all cases where there may be danger to life or an urgent need of qualified health intervention.

It is natural that the request for intervention at the 118 is made also in cases of doubt, as the 118 service is in fact a public counseling service.

As the rescuer places the call to the emergency, he should be close to the casualty (s), so that he can answer all the questions asked by the 118 operator.

If the emergency is the result of contact, inhalation or ingestion of chemical agents, you should always refer to the 118 operator the information of the material safety data sheet (MSDS).

⁷ See particularly this web page:

http://prevenzione.ulss20.verona.it/docs/Spisal/Leggi/DM388_Regolamento_attuativo_pronto_soccorso.pdf

There are circumstances (we discussed this in particular in the scenario number 8) for which, on the basis of the information received from the service 118, we can go directly to the hospital emergency department, another health service available 24/7 for diagnosis and therapy of injuries and illnesses .

The hospital emergency department takes care of workplace injuries when first aid at work is not enough and medical treatment and/or surgery are necessary and also when there is the need after an occupational injury to establish the prognosis and to start the compensation procedures.

WHO CAN HELP THE FIRST AID ASSISTANTS

To do voluntary work, such as first aid assistants, without having as a background a specific professional experience and without a close contact with professionals who can give support, is certainly a challenging situation and sometimes it is really difficult. Undoubtedly an appointed competent doctor can be a valid reference for first aid assistants, for many of their doubts starting with the composition and the management of the first aid box. The contents of this box are defined by legislation in general terms, so that companies in the various work sectors have the duty to adapt it to the specific needs of the environments in which they are working.

The employer is an important reference also for the first aid assistants ; as we know, the employer is the first person in charge for all what is related to prevention and safety measures at work; so we must ask him (or his delegate) for instance to replace things which have been used up in the first aid box and many other related things.

The organizational system of prevention, as defined by the European and our national legislation, establishes that first aid assistants are not the only employees who should be taking care of emergencies; there are also the employees engaged in other emergencies (such as fire protection, rapid evacuation from workplaces etc.).

These employees then share with first aiders the same role to play (when it is not, as is the case in small companies, that the same employees have to take care of all kinds of emergencies).



Another possible reference point in our Country where the Public Health safety services of the Local Health Units (Spisal) are not only responsible for the enforcement of law but also for prevention are the occupational physicians of the Spisal; from them first aiders can definitely get proper answers to their questions, if their company did not appoint a competent doctor.

THE CALL TO 118 FROM THE HORECA SECTOR⁸ In these cases relevant scenarios are: cardiac arrest and chest pain, two situations less unusual in Horeca than in other work sectors due to the fact that hotels and restaurants have not only many employees, but also a large number of guests and customers.

We already discussed cardiac arrest, we address chest pain here below.

CASE 1 ACUTE CHEST PAIN



We categorize as chest pain any pain from the nose to the navel in front and from the nape of the neck to the 12° dorsal vertebra in the back, which doesn't have neither a traumatic origin nor a clearly identifiable cause (this is the commonly used medical definition).

Acute chest pain should always be considered cardiac in origin until it's proved that it's not so. We must never underestimate its seriousness.

⁸ Here we consider what happens in Venice (Maurizio Dal Corso, an operator of the 118 Emergency Service of the Local Health Unit of Venice was our source).

Acute pain: a recent pain, which occurred in less than 24 hours; the pain is usually quite strong, but sometimes is not exactly a pain, it is something weighing heavily on your chest.

The most serious cause of chest pain is myocardial infarction (heart attack): the damage to the heart muscle due to the closure of a coronary artery and the consequent lack of blood supply to the heart.

WHAT TO DO:

- The patient should avoid any physical effort
- We put the casualty in a comfortable semi-sitting position,
- If possible we use pillows to support the casualty's shoulders and head.
- We reassure the victim and call the 118;
- If we can, we make someone else call the 118 without leaving the casualty unattended.

WATCH OUT

THE RISK OF CARDIAC ARREST OR SERIOUS SHOCK IS HIGH !

CASE 2. A SUDDEN LOSS OF CONSCIOUSNESS



This morning a lady leaving the spa after a few minutes of massage and sauna suddenly fainted and fell senseless to the ground.

There were no doctors and so John, the first aid attendant, was called; he intervened and quickly found that the woman was breathing regularly.

John called the 118 immediately, as should always be done in cases of loss of consciousness and remained close to the casualty.

After little more than a minute, the person completely recovered

What to do in case of a syncope:

Here below it is described all that the first aid attendant did

- Step 1: call the 118 “..I have before me a person who is unconscious ...”
- Step 2: he placed the casualty into the supine position
- Step 3: he opened a window
- Step 4. He took off the casualty's sweater and put her in a position to breathe more freely

When everything was finally ok, the rescuer asked the casualty to do a medical check-up as soon as possible.

Syncope: it is a rapid-onset and transient loss of consciousness which often ends with a quick and complete recovery and of which the cause is a reduced blood flow to the brain.

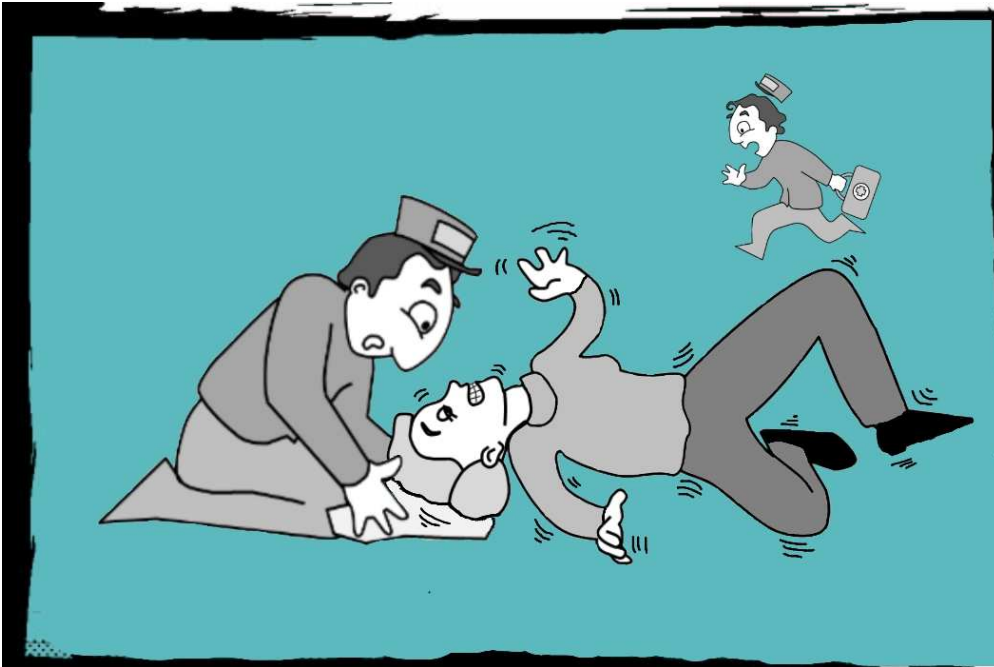
The most common is the reflex syncope (vasovagal syncope), which affects all age groups: a violent cough, physical efforts, emotional reactions and similar things are usual triggers of this type of syncope; another common type of syncope is the one that is caused by orthostatic hypotension (when a person quickly stands up); we can see it among the elderly and among people who take drugs for hypertension.

A third example of syncope are cardiac arrhythmias :a too low heart rate or a too high one, as can be in various heart diseases, may cause attacks of syncope.

WATCH OUT

TO SUDDENLY LOSE CONSCIOUSNESS IS ALWAYS A SERIOUS FACT:
WE MUST ALWAYS SUGGEST TO INQUIRING INTO THE CAUSES OF IT!

CASE 3 IN THE KITCHEN THE ASSISTANT COOK HAS SEIZURES



Seizure is a violent muscle hyperactivity which can be dangerous for the casualty as the victim becomes unconscious. It may occur as a result of:

- High fever (only if the victims are children)
- Epilepsy (seizure type "Grand Mal")
- Stroke;
- Hypoglycemia (low blood sugar).
- Other serious pathological manifestations (such as some infectious diseases etc.)

Epilepsy is the most common cause of seizures; whatever the cause, during the seizure the person suddenly loses consciousness, muscles contract in a violent spasm lasting 10-20 sec; then a fine tremor of the limbs appears and it becomes increasingly intense throughout the body; there are also rhythmic muscle contractions lasting about 30 seconds.

During the crisis, due to the difficulties of breathing, often the lips and the skin of the ear lobes and nails show a bluish color.

The casualty may bite her tongue following the contraction of the facial muscles.

At the end of convulsions, there is often a state of coma. The muscles are relaxed and there may be loss of urine; the coma last about 5 minutes, then a slow and spontaneous recovery of consciousness occurs.

WHAT TO DO:

1. Keep calm
2. You have to look around: is it a dangerous place? If the place is not dangerous, the person can remain where she is. It's only necessary to move chairs or other furniture whose impact can cause injuries to the casualty.
3. Put something soft under the casualty's head, for example a pillow or a folded jacket if the person fell to the ground
4. Make a note of when the seizure started (to refer to physicians and family members how long the seizures lasted)
5. Never try to catch hold on the person
6. Do not try to put anything in the victim's mouth
7. When the seizure ends, we have to put the person in the recovery position
8. At this moment we check the mouth and make sure that nothing obstructs breathing
- 9 We have to remain close to the victim until a full recovery takes place

WE MUST CALL 118 IF:

- Seizures last more than 5 minutes.
- The casualty has a second crisis immediately after the first.
- The casualty was injured during the seizure
- The seizure occurs in water.
- It is known that the person has poor health conditions (diabetes, heart diseases, etc.) or she is pregnant.

WATCH OUT

NEVER TRY TO PUT ANYTHING IN THE CASUALTY 'S MOUTH !

CASE 4 IN THE PARK A GARDENER WAS ATTACKED BY A SWARM OF WASPS

Mark, a gardener, was stung on his arm by a wasp; his arm swelled and was aching. After a few hours however everything changed for the better, the swelling stopped and the pain too, without using any drugs, only applying cold compresses.

INSECT BITES

In most cases, the sting of Hymenoptera (bees, wasps and hornets) is not a serious accident; symptoms are limited to the body part where the victim was stung: an itchy red swelling and some pain.

A few people (about 10% of the general population) can have very strong local reactions, such as intense swelling and much pain; in these cases medical advice is required.

A smaller number of people (about 3% of the general population) are particularly sensitive to Hymenoptera venom and can have allergic reactions⁹.

These people have symptoms and signs even far from the point where they were stung; in severe cases there may be a sudden difficulty of breathing, fainting or an alteration or complete loss of consciousness.

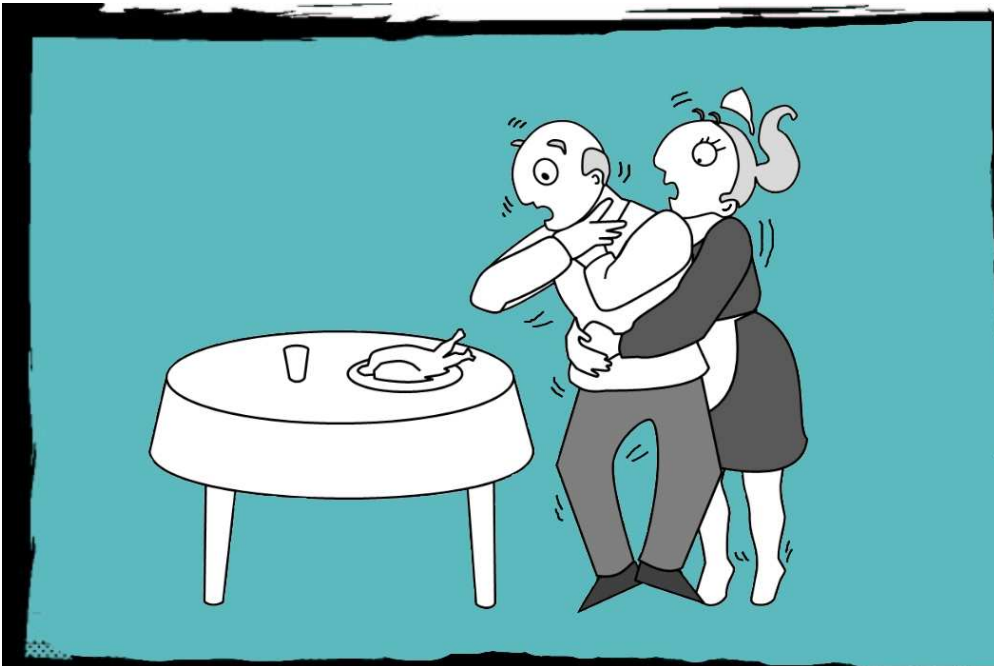
WHAT TO DO: There is no need to remove the sting with tweezers; just wash with soap and water and rinse, apply cold compresses, then check from time to time the affected area and the health conditions of the casualty (!).

WATCH OUT

INSECT BITES: ALWAYS CHECK IF THERE ARE ANY SIGNS/SYMPTOMS FAR FROM THE POINT OF THE STING

⁹ Allergy- Allergic reaction: It is an illness of the immunitary system characterized by excessive reactions almost always brought by particular antibodies (IgE) towards harmless substances, such as, for instance, pollens (it depends on the individual sensibility, but also from the intensity /duration of the exposure).

CASE 5 AT THE RESTAURANT A CUSTOMER HAS HAD A SEVERE RESPIRATORY OBSTRUCTION DUE TO INGESTED FOOD



The customer, an elderly gentleman, was enjoying a dish of chicken when he suddenly started coughing violently and was breathing very badly, his lips became violet. Pina, the first aid attendant, intervened immediately, she approached the casualty and saw that the gentleman had stopped coughing and his breathing was very difficult. She gave 5 back blows between the person's shoulder blades with the fist of her hand; then he practiced the Heimlich manoeuvre. At the same time she asked a colleague, who was close to her, to call the 118 and maintain the connection with the operative room.

On the second attempt, the manoeuvres were successful!

RESPIRATORY OBSTRUCTION FROM MECHANICAL CAUSES. WHAT TO DO:

Nothing must be done while the casualty continues to cough; when she is not coughing anymore and is no longer able to speak you have to call 118 and practice the manoeuvres to clear the airways.

HEIMLICH MANOEUVRE (H. HEIMLICH ,1974).

THIS MANOEUVRE IS RARELY ASSOCIATED WITH COMPLICATIONS;
A HEALTH CHECK AFTER HAVING BEEN SUBMITTED TO THE MANOEUVRE
IS ANYWAY HIGHLY RECOMMENDABLE

CASE 6. AN INJURY TO THE HEAD



Paul, the bellboy of our hotel, fell to the ground from his bike this morning and hit his head ; he fell just inside the tram track, but luckily the car which followed him stopped in time and he was not knocked down. Now his head is bleeding and he feels severe pain, but is vigilant and collaborative.

WHAT TO DO:

A report on what was done by the hotel first aid attendant, who was at the site at the moment:

- he assessed the state of consciousness using the specific procedure, then observed attentively to ascertain any other symptom or disorder.

He continued his observation until Paul agreed with his wife to go back home and wait for his family doctor.

It is not easy to determine what is the severity of a blow to the head; the head is full of blood vessels and then even small injuries can cause extensive bleeding; localized swellings too (the common bumps) are easy to be seen.

To evaluate the dynamics of an accident (both work related and not) it helps a lot to understand the seriousness of an accident (a fall from height? a violent blow, as in the case of falling from a moving vehicle? a heavy compression on the head? ...)

The main point to consider is the consciousness. We have to ascertain if there are disorders of alertness, memory or behaviour, dizziness, a severe headache with nausea.

If the observation of the casualty make us suspect disorders or even if it's sure there are disorders, then it is definitely necessary to ask for the intervention of the 118 emergency service.

In case of head traumas we shall always require an observation period of several hours (at least 6 hours), because sometimes the lack of consciousness does not appear immediately, it arises instead many hours or even days after the accident (an intracranial hematoma may form which spreading presses more and more on the nerve cells of the brain).

WATCH OUT FOR NOSE OR EAR BLEEDING: this is a serious indicator of pathology. This is also almost the only case¹⁰ in which we must not press on the bleeding area: blood must flow freely in order not to increase the intracranial compression.

HEAVY BLOWS TO THE HEAD

AT LEAST 6 HOURS OF OBSERVATION AND IN DOUBTFUL CASES ALWAYS CALL 118!

¹⁰ The other case is that of facial bleeding , see p.26

CASE 7. A HEAT STROKE

A 16 year old boy fell to the ground playing soccer in the bright daylight at the football field of the beach resort; bystanders said he was complaining of dizziness and he looked quite exhausted before falling down.

He felt confused, he was sweating a lot and his skin was very hot. The resort rescuer Beppe suspected a heat stroke and immediately called the 118; he took the boy to a cool place and began to soak his head and neck with cold water.

The internal body temperature is normally 36-38° C, with a range of variability of about half a degree (the maximum level is at mid-afternoon, the minimum one is before sunrise). During a heat stroke internal temperature may be more than 40° C.

During physical exercise, if the outside temperature is high and there is a lot of moisture, we have lower evaporation with an increased internal temperature and then a greater risk of heat stroke. Sweating can be severely reduced and therefore an increase in body temperature due to a failure of the thermoregulatory system can result.

SYMPTOMS: due to brain sensitivity to thermal stress, the first symptoms of heat stroke are loss of judgment and alertness, an alteration of consciousness. Often we can have a severe headache and exhaustion; we can also have coma and respiratory arrest in extreme cases.

WHAT TO DO

When we suspect a heat stroke, we should immediately call the 118. We have to always check the vital functions (consciousness and breathing); the victim must be undressed and taken to a cool place.

If unconscious, he must be placed into the recovery position and soaked with cold compresses. Pending medical intervention we should continue to monitor the vital functions.

HEAT STROKE

ALWAYS MONITOR THE HEALTH CONDITIONS OF THE CASUALTY AND HER STATE OF CONSCIOUSNESS

CASE 8. AN ACCIDENTAL INGESTION OF TOXIC SUBSTANCES



Today an accident occurred at our hotel which fortunately wasn't serious, but it could have been: the ingestion of a toxic product for cleaning premises and household objects. The product is a colorless water-diluted polish used to clean silverware; it was dangerously put into an empty bottle of mineral water. The casualty, a female room assistant, complained of a severe hoarseness, hypersalivation, chest pain and difficulty on breathing

WHAT TO DO

The first aid assistant immediately called the 118 and asked a colleague to trace as soon as possible the Material Safety Data Sheet (MSDS) of the product.

WATCH OUT It is important to avoid causing vomiting, which in these cases can give rise to esophageal injuries due to the "coming back" of the toxic along the digestive tract; don't make the victim drink any water or milk. The reaction of the chemical with water can cause further injuries; milk, given its high water content, can cause the same negative consequences of water.

INGESTION OF TOXIC CHEMICALS.WATCH OUT: NEVER CAUSE VOMITING!

CASE 9. A FALL DOWN THE STAIRS



Piero, a porter, was in a hurry and didn't use the handrail; he fell down and started complaining that his ankle hurts. Giulio, our first aid attendant, was called to see what happened and did the four simple things required in these cases:

- told Piero not to move his leg;
- brought the ice gel band (which must be kept in a compartment of the freezer) and put it in a cloth over the affected ankle;
- made a bandage and used a stick to block the ankle joint;
- then raised Piero's leg a little leaning it on a cabinet.

Because the ankle was very aching and swollen, Piero asked to be accompanied to the emergency room of the hospital to carry out a specific medical examination and this was done. Eventually Giulio made a short report of the accident for the service of prevention and protection in accordance with the procedures of the hotel.

WATCH OUT: IN CASE OF AN INJURY, ICE MAY NOT BE SUFFICIENT !

CASE 10. BURNS WHILE WORKING IN THE KITCHEN

Today a cook moved a big pot brimful of boiling water by himself, made a sudden movement and the pot caused an extended burn on his forearm.

Quickly he poured tap water on the affected limb for 15 minutes and then applied some gauzes (which are important to have always ready in the first aid box) to cover the burns

Finally, although of course with some difficulty, he resumed his usual work.

Rescuers at workplace and workers as must not use drugs (such as creams or ointments) in case of burns: they have just to put abundant jets of water at room temperature on the affected body parts (or keep the burnt part under the water tap for some minutes) and then cover with gauzes.

WATCH OUT: IN CASE OF BURNS, DON'T USE CREAMS OR OINTMENTS !!