



Appendix no 1
PZB.I02 First premedical aid
instruction

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EXPLANATIONS

The following signs have been entered into the INSTRUCTION:



INFORMACJA



OBOWIĄZEK



SKORZYSTAJ
ZE ŚRODKÓW
PIERWSZEJ POMOCY



WEZWIJ POMOC

Contact:

The Company Medical Centre

Phone: (+48) 71 794 3909

or

Plant Dispatcher

Phone: (+48) 71 794 2998

FIRST PREMEDICAL AID RULES



3.1. DEFINITIONS AND ABBREVIATIONS

Not defined

3.2. GENERAL RULES

Not defined

3.3. DESCRIPTION OF THE PROCEDURE

3.3.1. ACCIDENT REPORTING

if his/her state of health so permits, an employee who has been involved in an accident should inform his/her supervisor immediately of the accident.

Any employee who notices or learns about an accident is obliged:

- provide immediate assistance to the injured worker
- call an ambulance of the Company Rescue Service through the Company Dispatcher:
 - by phone:
 - **2998** from a landline phone
 - **(+48) 71 794 2998** from a mobile phone
 - or through a direct connection and provide the Facility Dispatcher with information on the type of injury and its cause
 - by pressing the button of the Manual Fire Warning device - ROP
- report the accident to the injured worker's superior if possible



3.3.2. CARDIOPULMONARY RESUSCITATION

When starting with CPR, proceed according to the following rules:

STEP 1

SAFETY

Keep yourself, victim and witnesses of the events safe

STEP 2

REACTION

Check the reaction of the victim

Shake the victim's shoulders and ask out loud:

"IS EVERYTHING OKAY?"



STEP 3

**THE VICTIM
REACTS**



- leave the victim in his/her position,
- assess the volume and type of the injury,
- call for help if you need it,
- regularly check the condition of the victim.

**THE VICTIM
DOES NOT**



CLEAR THE AIRWAYS

Turn the victim on his/her back and clear the airways by bending his/her head and raising the jaw - place one hand on the victim's forehead and gently bend his/her head back, leaving your thumb and forefinger free to clog the victim's nose if rescue breathing is needed. Make sure there is no foreign body in the mouth.



STEP 4

CHECK THE BREATH

Keeping the airways clear,
with your sight, hearing and touch, look for proper breathing

- assess the movements of the chest with your eyes,
- listen to the sound of breathing at the victim's mouth,
- try to feel the air movement on your cheek.



NOTE!

If you have any doubt as to whether the breathing is correct, act as if it is abnormal.

STEP 5

THE VICTIM IS BREATHING



- put the victim in a safe position,



- ask somebody or go yourself to get help
- call an ambulance of the Company Rescue Service,
- monitor the victim's breathing



2998

(+48) 71 794 2998



THE VICTIM IS NOT BREATHING



CALL AN AMBULANCE

Ask someone to call an ambulance of the Company Rescue Service.
Otherwise, call it yourself.



2998

(+48) 71 794 2998

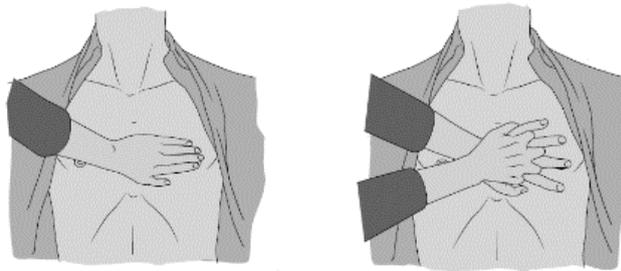


CARDIOPULMONARY RESUSCITATION

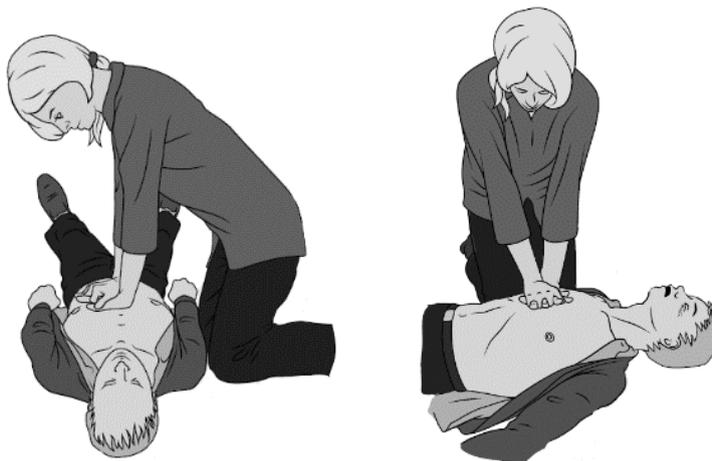
STEP 6

START COMPRESSING THE CHEST

- kneel next to the victim,
- place the wrist of one hand in the middle of the victim's chest (in the lower half of the sternum),
- on your hand place the wrist of your other hand, splice the fingers of both hands and make sure you press on the injured person's sternum



- lean over the injured person, straighten the arms perpendicularly to the sternum and compress to a depth of 5-6 cm and **make 30 compressions** at a rate of **100 presses/min.**



COMBINE CHEST COMPRESSION WITH RESCUE INHALATIONS

30 compressions 2 inhalations

- **after 30 chest compressions**, clear the airways by bending the victim's head upwards by lifting the mandible,
- tighten the wings of the nose using the index finger and thumb of the hand on the victim's forehead,
- leave the victim's mouth gently open while keeping the mandible



- lifted,
- using a breathing mask, make **2 inhalations**,



- blow the air slowly into the victim's mouth for about 1 second (as with normal breathing) while observing whether the chest is lifting, such rescue breathing is effective.

If you are unable to, do not have a breathing mask or do not want to make rescue breathing, compress the chest continuously with a frequency of 100 compressions / minute

If the first rescue breathing does not cause lifting of the victim's chest as if you were breathing normally, do the following:

- check whether the bend of the head and the uplift of the mandible have been properly done,
- make no more than 2 ventilation attempts each time before you start chest compressions again.

If there is more than one rescuer on site, rescuers should change during CPR every 1-2 minutes to prevent fatigue. CPR interruptions during shifts should be minimized.

Continue CPR until:

- qualified medical services arrive and take it over,
- the victim starts breathing properly,
- you are exhausted.

NOTE:

Do not use the mouth-to-mouth method if the injured person has inhaled or swallowed any substance. Apply artificial respiration using a mask with a one-way valve available in first aid kits.



3.3.3. FAINTING

	<p>Fainting is a short-term loss of consciousness</p> <p>Symptoms:</p> <ul style="list-style-type: none"> • weakness, • "darkness" before eyes, • tinnitus, • pale, sweaty skin, • dizziness. 	
	<p>First aid:</p> <p>Put the injured person on the back, lift his/her legs to the height of 20 - 30 cm, allow fresh air, check if the rescued person has not been injured, call an ambulance of the Company Rescue Service.</p>	

3.3.4. SHOCK

	<p>Shock is a violent cardiovascular reaction leading to deep hypoxia of vital organs</p> <p>Shock is a direct life-threatening condition.</p> <p>Symptoms:</p> <ul style="list-style-type: none"> • pale face, • cold, sticky sweat, • anxiety, fear, • shallow breathing and accelerated heart rate, • chills, nausea and vomiting, • psychomotor agitation. 	
	<p>First aid:</p> <p>We put the victim on the back with his legs raised to a height of 30-40cm. If the victim is unconscious and vomiting, he or she must be placed in the recovery position to prevent aspiration. Call an ambulance of the Company Rescue Service.</p>	

3.3.5. EXTERNAL INJURIES - HAEMORRHAGES

	<p>A haemorrhage is an outflow of blood from cut or torn arterial, venous or capillary vessels</p> <p>Due to the nature of the bleeding, we can divide it into:</p> <ul style="list-style-type: none"> - arterial bleeding, - venous bleeding, - capillary bleeding. <p>Arterial bleeding - symptoms</p> <ul style="list-style-type: none"> - bright red blood, - pulsed blood flow from the wound (according to the heart rate), - very abundant blood flow. <p>Venous bleeding - symptoms</p> <ul style="list-style-type: none"> - dark red blood, - flows out in a steady stream at a lower speed. <p>Bleeding from capillaries - symptoms</p> <ul style="list-style-type: none"> - blood is superficially extravasated, - bleeding is oozing (may be heavy), - there is a high probability of infection. 	
	<p>First aid:</p> <ul style="list-style-type: none"> • Your own safety - wear disposable gloves, • Make the victim sit or lie, • If the hemorrhage is on the limb, lift it up, • Secure the wound with a dressing, <p>Do not put lignin or cotton wool on the wound!</p> <ul style="list-style-type: none"> • if the bleeding is heavy and soaks through the dressing, add another layer and wrap it in a bandage, <p>Do not remove previously applied layers!</p> <ul style="list-style-type: none"> • call an ambulance of the Company Rescue Service, • observe the appearance of the victim and the dressing, • implement an anti-shock procedure (point 3.3.4), • protect the victim against heat loss - cover him/her with a thermal blanket. 	 

3.3.6. EXTERNAL WOUNDS AND BLEEDING

	<p>A wound is a damage to the epidermis, skin and deeper tissues, and even to organs as a result of mechanical trauma, often with simultaneous damage to vessels. In case of vascular damage, the blood is extravasating, and this phenomenon is called bleeding or haemorrhage.</p>	
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	<p>A tourniquet only be used on limbs and in specific situations:</p> <ul style="list-style-type: none"> • traumatic amputation, • crushing a limb, • temporarily, if there is a need to help many of the wounded at once, • in case of persistent bleeding due to ineffective compression dressing, • if a pressure dressing cannot be applied to the wound. 	
	<p>First aid:</p> <ul style="list-style-type: none"> • stop the bleeding by pressing on the bleeding wound trying to stop the blood flow and prepare a touniquet for possible use in case of increased bleeding, • put on a dressing - the resulting stump should be covered with a sterile bandage and immobilize, • call an ambulance of the Company Rescue Service, • implement an anti-shock procedure (point 3.3.4), • locate the amputated part of the limb - a sterile, dry dressing is used to dress it and the stump is placed in a sealed plastic bag, which is dipped, if possible, in a second plastic bag with water, and then the whole thing is transferred together with the victim to the health care unit. <p>After it has been put on, the time (hour) should be precisely recorded. Release of the tourniquet can only be done by a doctor, especially if it is more than 10 minutes after it has been worn. Substances that are formed as a result of ischemia in the tissues that are located peripherally from the tourniquet can lead to blockages in vessels and other organs and damage them. Call an ambulance of the Company Rescue Service immediately.</p>	 

3.3.7. INTERNAL HAEMORRHAGE

	<p>Internal haemorrhage may result from internal organ disorders (bleeding from gastric and duodenal ulcers) or from injuries to the internal organs inside the chest and abdomen, long bone fractures.</p> <p>Symptoms:</p> <ul style="list-style-type: none"> • pale skin, • a weak heartbeat, • the symptoms of the shock, • a confusion of consciousness, • bloody vomitting, • cold sweat, • accelerated breathing. 	
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	<p>First aid:</p> <ul style="list-style-type: none"> • place the victim in the most comfortable position for breathing (higher head and chest positions), • Call an ambulance of the Company Rescue Service. • control vital functions, • implement an anti-shock procedure (point 3.3.4), • protect against heat loss - cover the victim with a thermal blanket. 	
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3.3.8. FRACTURES

	<p>A bone fracture is the interruption of its continuity due to the action of a mechanical factor with stronger force than the limits of flexibility of bone tissue</p> <p>The most common causes of fractures are:</p> <ul style="list-style-type: none"> • hits, • crushes, • squeezes, • gunshots. <p>The fractures are divided into:</p> <ul style="list-style-type: none"> • closed (no damage to the skin), • open (bone splinter sticks out from under the skin). <p>The symptoms of a fracture:</p> <ul style="list-style-type: none"> • the pain, • the limb's dysfunction, • the obstruction of movement, • swelling, • bleeding. <p>Fractures can be accompanied by:</p> <ul style="list-style-type: none"> • shock (caused by pain or loss of blood), • additional injury from moving bone fragments, • infections. 	
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	<p>First aid:</p> <p>Closed fracture:</p> <ul style="list-style-type: none"> • Call an ambulance of the Company Rescue Service. • assess the general condition of the victim (consciousness, breathing), • do not move the victim, if neck, spine or pelvis injury is suspected, • limit the possibility of any movements in the area of the fracture, • immobilize the broken limb according to the principle of immobilization of two adjacent joints, • be careful when moving and transporting the wounded person, • ensure his/her mental comfort. 	 
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	<p>Open fracture:</p> <ul style="list-style-type: none"> • Call an ambulance of the Company Rescue Service. • stop any possible bleeding (put on sterile compression dressing), • immobilize the limb, • secure the protruding bone so that it cannot be moved, • be careful when moving and transporting the wounded person, • ensure his/her mental comfort. 	
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3.3.9. SPINE INJURY

	<p>Events when spinal injuries can be suspected:</p> <ul style="list-style-type: none"> • traffic accidents, • falls from heights, • jumps into the water, • beatings. <p>Symptoms (cervical section):</p> <ul style="list-style-type: none"> • pain, • an unnatural head position, • limb movement disorders, • disturbance or loss of sensation below the point of damage, • lymphatic paralysis, • respiratory and circulatory disorders, • blood pressure and heart rate drop, • flaccid paralysis and no reflexes below the injury level. 	
	<p>First aid:</p> <ul style="list-style-type: none"> • call an ambulance of the Company Rescue Service. • assess the condition of the victim, • implement an anti-shock procedure, • immobilize on the spinal board, • ensure his/her mental comfort. 	 

3.3.10 BURNS AND FROSTBITES

	<p>A burn is a tissue damage resulting from the operation of:</p> <ul style="list-style-type: none"> • a thermal agent, • a chemical agent, • an electric agent. <p>Thermal burns</p>	
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	<p>The most common causes of thermal burns are</p> <ul style="list-style-type: none"> • flames, • hot fluids, • steam, • glowing metals, • ultraviolet rays (sunburn). <p>The size of the burn is assessed on the basis of: Area of a burn (the "nines rule" is used here)</p> <ul style="list-style-type: none"> • head 9% of body surface • upper limbs 9% of body surface • frontal torso surface..... 18% body surface • rear body surface 18% of body surface • lower limbs 18% of the body surface • urinary and genital organs..... 1% of body area <p>The depth of the burn:</p> <ul style="list-style-type: none"> • degree 1- redness and pain, swelling, skin sensitivity to touch, • degree 2 - redness, pain, blisters, serous fluid leakage, • degree 3 - tissue necrosis, pain elimination, tissue charring. <p>Frostbite is a local lesion of the skin that occurs as a result of low temperatures that causes total or temporary damage to cooled parts of the body</p>	
	<p>First aid:</p> <p>Thermal burn:</p> <ul style="list-style-type: none"> • separate from the burning agent • call an ambulance of the Company Rescue Service, • remove clothes, jewelry, • cool down with water until the pain subsides (20-30 minutes), • place the victim in a position comfortable for him/her, • put a sterile dressing on, • no dressing materials are used for facial burns, • control vital functions (breath, conscious), • ensure his/her mental comfort. <p>Frostbite:</p> <ul style="list-style-type: none"> • gradually warm up the defrosted part of the body, • ensure additional covering of the victim, e.g. a thermal blanket • call an ambulance of the Company Rescue Service, 	 

3.3.11 . CHEMICAL BURNS

	<p>Chemical burns are caused by contact with concentrated acids, alkalis or</p>	
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	<p>certain organic compounds (e.g. phenols), which may occur not only in liquid but also in solid or gaseous forms.</p> <p>Corrosive action - chemical burn is most often caused by:</p> <ul style="list-style-type: none"> • alkalis, causing epidermal necrosis of tissues exposed to direct contact with these compounds, i.e. skin, nasopharyngeal, oesophageal, stomach and eye mucous membranes, • acids that cause coagulation necrosis. The risk for life depends on the extent of the skin burn and the degree of damage, • during direct contact with the skin, some chemicals can damage its protective layer, cause dryness, roughness and ulceration. <p>Symptoms:</p> <ul style="list-style-type: none"> • sharp, stabbing, burning pain, • redness or spots on the skin, • blisters and skin exfoliation, • oral and chest pains (gastrointestinal and inhalation burns), • shortness of breath, coughing, vomiting. 	
	<p>First aid:</p> <ul style="list-style-type: none"> • assess the location of the incident, • evacuate the victim, • remove clothing and jewellery, especially those in contact with the chemical, • in case of lime burns, clothing and jewellery must be removed mechanically and then the burnt area should be rinsed with water, • go as soon as possible to the point with access to running water (safety shower) and rinse the area burnt thoroughly (20-30 minutes), • put a dry, sterile dressing on the burnt area, • call an ambulance of the Company Rescue Service, • protect the victim from loss of heat, • ensure his/her mental comfort. 	   

3.3.12. CHEMICAL EYE BURNS

	<p>Chemical eye burns are urgent states requiring immediate action. Their severity is strictly dependent on the type of substance acting, its pH and concentration, as well as on its ability to penetrate into the tissues and the duration of its contact with the eye surface.</p>	
	<p>First aid:</p> <ul style="list-style-type: none"> • go to a drinking water source as soon as possible, go to a point of access to running water (eye wash, safety shower) and rinse the eyes thoroughly, • with the thumb and index finger, dilate the upper and lower eyelids as much as possible and rinse the eye from the inside of the corner of the eye to the outside for at least 20-30 minutes, • call an ambulance of the Company Rescue Service, 	 

3.3.13. ELECTROCUTION

	<p>An electrocution is the result of the flow of electric energy through the human body.</p> <p>An electrocution may occur through:</p> <ul style="list-style-type: none"> • Direct contact - as a result of current flowing through the victim's body, it can lead to cardiac arrest or respiratory arrest, • Electric arc - is formed as a spark between non-contacting objects of different voltages resulting in high temperature causing deep burns, • An electric flash - occurs when an electric current hitting the victim's body flows down its surface without reaching deeper tissues, • Mechanical injury - caused by muscle contraction as a result of alternating current or as a secondary injury after rejection from a DC source. <p>Symptoms:</p> <ul style="list-style-type: none"> • different degrees of burns, from fainting of skin to charring of tissues, • loss of consciousness, • breath arrest, • sudden cardiac arrest. 	
	<p>First aid:</p> <ul style="list-style-type: none"> • Take special care not to get electrocuted yourself; • Interrupt the power supply to the unit/machine by means of: <ul style="list-style-type: none"> - turning it off, - pulling the plug of, - to turn off the fuse, • if it is not possible to switch off the power supply, the victim must be removed/pushed away from the power supply by means of non-conductive objects (e.g. a dry wooden strip), • call an ambulance of the Company Rescue Service, • assess the condition of the victim - implement CPR if required (point 3.3.2.), • if the victim is breathing and spinal injury can be eliminated, place him in a safe position. 	 

3.3.14. CHEMICAL POISONINGS

A poison is any solid, liquid or gaseous substance that interferes with the body's vital functions when introduced.

The risk to life and health in acute poisoning depends on:

- the way a chemical works,
- doses or concentrations in the working environment,
- the duration of exposure,
- the way the substance is absorbed into the body.

Depending on the state of aggregation and the size of the particles, chemical compounds can enter the body by different routes:

- through the respiratory system (gases, vapors),
- through the skin (liquids, vapors),
- through the digestive tract (liquids, solids).

Knowledge of the mechanism of operation of a substance is the most useful for assessing the effects of an acute toxic operation of a chemical and establishment of the first-aid procedure:

- narcotic effect - brain disorders (headaches and dizziness, anxiety, psychomotor agitation, imbalance, drowsiness, convulsions, mental entanglement, vision disorders, consciousness disorders, possibility of coma, respiratory and circulatory arrest),
- suffocating effect - the feeling of impaired breathing is due to lack of oxygen, caused by obstruction of the airways, disorders of lung function, disorders in oxygen transport through haemoglobin. Airway obstruction may result from laryngeal oedema or bronchospasm due to highly irritating or sensitizing substances,
- irritating gases, dust or vapours of chemical substances result in inflammatory changes in the airways. Coughing and sneezing occurs under the influence of irritating chemicals. At high concentrations, reflex cramping of the epiglottis and bronchi, as well as pulmonary and cyanosis oedema and expectoration of large amounts of mucus can occur,
- toxic substances may also result in changes in organs and systems: liver, kidneys, nervous system, lungs, hematopoietic system. These changes may become evident late or after several hours or sometimes several days.



First aid:

- keep your own safety in mind (protective clothing and gloves, respiratory protection and other protective equipment),
- remove the injured person from the danger zone,
- call an ambulance of the Company Rescue Service,
- check vital functions (breathing, awareness),
- **If the injured person is not breathing, perform cardiopulmonary resuscitation - rules are presented in section 3.3.2,**
- remove and isolate contaminated clothing and shoes,
- rinse contaminated skin and eyes with running water for at least 20-



	<p>30 minutes,</p> <ul style="list-style-type: none">• do not induce vomiting if corrosive substances (acids, lyes), organic solvents, foaming agents are swallowed, Do not give anything to drink to the victim !• protect the victim against heat loss,• secure possible injuries,• control the airway,• ensure his/her mental comfort.• inform the medical personnel of the substance they are dealing with.	
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