Training program "Providing first aid to victims at work"

Content:

1. General Provisions

first aid training program was developed in accordance with these rules for the provision of pre-medical medical care (hereinafter referred to as the rules) developed in accordance with c paragraph 2 of Article 122 of the Code of the Republic of Kazakhstan dated July 7, 2020 "On the health of the people and the healthcare system" and determine the procedure for providing pre-hospital medical care.

First aid is a set of measures aimed at restoring or preserving the life and health of the victim. It should be provided by someone who is next to the victim (mutual assistance), or the victim himself (self-help) before the arrival of a medical worker.

In order for first aid to be effective, the organization must have:

- first aid kits with a set of necessary medicines and medical supplies for first aid;

- posters depicting the methods of providing first aid to victims of accidents and performing artificial respiration and external heart massage.

The person providing assistance must know the main signs of a violation of the vital functions of the human body, as well as be able to free the victim from the action of dangerous and harmful factors, assess the condition of the victim, determine the sequence of first aid methods used, and, if necessary, use improvised means when providing assistance and transporting the victim.

The sequence of actions when providing first aid to the victim:

- elimination of the impact on the body of the victim of dangerous and harmful factors (release him from the action of electric current, extinguishing burning clothes, removing him from water, etc.);

- assessment of the victim's condition;

- determination of the nature of the injury that poses the greatest threat to the life of the victim, and the sequence of actions to save him;

- implementation of the necessary measures to save the victim in order of urgency (restoration of airway patency; performing artificial respiration, external heart massage; stopping bleeding; immobilization of the fracture site; applying a bandage, etc.);

- maintaining the basic vital functions of the victim until the arrival of medical personnel;

- calling an ambulance or a doctor or taking measures to transport the victim to the nearest medical organization.

If it is impossible to call medical personnel to the scene, it is necessary to ensure the transportation of the victim to the nearest medical organization. It is possible to transport the victim only with steady breathing and pulse.

In the case when the condition of the victim does not allow him to be transported, it is necessary to maintain his basic vital functions until the arrival of a medical worker.

2. Signs to determine the state of health of the victim

Signs by which you can quickly determine the state of health of the victim are as follows:

- consciousness: clear, absent, impaired (the victim is inhibited or agitated);

- the color of the skin and visible mucous membranes (lips, eyes) : pink , bluish, pale.

- breathing: normal, absent, disturbed (irregular, superficial, wheezing);

- pulse on the carotid arteries: well defined (rhythm correct or incorrect), poorly defined, absent;

- pupils: dilated, constricted.

3. A complex of resuscitation measures

If the victim has no consciousness, breathing, pulse, the skin is cyanotic, and the pupils are dilated, you should immediately begin to restore the vital functions of the body by performing artificial respiration and external heart massage. It is required to note the time of respiratory arrest and blood circulation in the victim, the time of the start of artificial respiration and external heart massage, as well as the duration of resuscitation and report this information to the arriving medical personnel.

CPR :

Artificial respiration is carried out in cases where the victim does not breathe or breathes very badly (rarely, convulsively, as if with a sob), and also if his breathing constantly worsens, regardless of what caused it: electric shock, poisoning, drowning, etc. d. The most effective method of artificial respiration is the "mouth-to-mouth" or "mouth-to-nose" method, since this ensures that a sufficient volume of air enters the victim's lungs.

The "mouth-to-mouth" or "mouth-to-nose" method is based on the use of air exhaled by the caregiver , which is forced into the victim's airways and is physiologically suitable for the victim to breathe. Air can be blown through gauze, a handkerchief, etc. This method of artificial

respiration makes it easy to control the flow of air into the lungs of the victim by expanding the chest after blowing and then subsiding as a result of passive exhalation.

To carry out artificial respiration, the victim should be laid on his back, unfasten clothing that restricts breathing and ensure the patency of the upper respiratory tract, which, in the supine position in an unconscious state, is closed by a sunken tongue. In addition, there may be foreign contents in the oral cavity (vomit, sand, silt, grass, etc.), which must be removed with the index finger wrapped in a scarf (cloth) or bandage, turning the victim's head to one side.

After that, the assisting person is located on the side of the victim’s head, slips one hand under his neck, and with the palm of the other hand presses on his forehead, throwing his head back as much as possible. In this case, the root of the tongue rises and frees the entrance to the larynx, and the victim's mouth opens. The caregiver leans towards the victim's face, takes a deep breath with his mouth open, then fully covers the victim's open mouth with his lips and exhales vigorously, with blowing air into his mouth with some effort; at the same time, he covers the nose of the victim with his cheek or fingers of the hand located on the forehead. In this case, it is imperative to observe the chest of the victim, which should rise. As soon as the chest has risen, the air injection is stopped, the assisting person raises his head, and the victim passively exhales. In order for the exhalation to be deeper, you can gently press the hand on the chest to help the air out of the lungs of the victim.

If the victim has a well-defined pulse and only artificial respiration is necessary, then the interval between artificial breaths should be 5 s, which corresponds to a respiratory rate of 12 times per minute.

In addition to the expansion of the chest, a good indicator of the effectiveness of artificial respiration can be the pinking of the skin and mucous membranes, as well as the exit of the victim from an unconscious state and the appearance of independent breathing.

When performing artificial respiration, the assisting person must ensure that the blown air enters the lungs, and not into the victim's stomach. When air enters the stomach, as evidenced by bloating "under the spoon", gently press the palm of your hand on the stomach between the sternum and navel. This may cause vomiting, so it is necessary to turn the head and shoulders of the victim to the side (preferably to the left) to clear his mouth and throat.

If the jaws of the victim are tightly clenched and it is not possible to open the mouth, artificial respiration should be carried out according to the "mouth to nose" method.

Young children are blown into the mouth and nose at the same time. The smaller the child, the less air he needs to inhale and the more often it should be blown in comparison with an adult (up to 15-18 times per minute).

When the first weak breaths appear in the victim, an artificial breath should be timed to the moment he begins to breathe independently.

Cease artificial respiration after the victim recovers sufficiently deep and rhythmic spontaneous breathing.

It is impossible to refuse to help the victim and consider him dead in the absence of such signs of life as breathing or pulse. Only a medical professional has the right to make a conclusion about the death of the victim.

External cardiac massage:

An indication for an external heart massage is cardiac arrest, which is characterized by a combination of the following symptoms: pallor or cyanosis of the skin, loss of consciousness, no

pulse in the carotid arteries, cessation of breathing or convulsive, incorrect breaths. In case of cardiac arrest, without wasting a second, the victim must be laid on a flat, rigid base: a bench, a floor, in extreme cases, put a board under his back.

If assistance is provided by one person, he is located on the side of the victim and, bending over, makes two quick energetic blows (according to the “mouth-to-mouth” or “mouth-to-nose” method), then unbends, remaining on the same side of the victim, palm puts one hand on the lower half of the sternum (stepping back two fingers higher from its lower edge), and raises the fingers. He puts the palm of the second hand on top of the first across or along and presses, helping by tilting his body. When pressing, the arms should be straightened at the elbow joints.

Pressing should be done in quick bursts so as to displace the sternum by 4-5 cm, the duration of pressure is no more than 0.5 s, the interval between individual pressures is no more than 0.5 s .

In pauses, the hands are not removed from the sternum (if two people provide assistance), the fingers remain raised, the arms are fully extended at the elbow joints.

If the revival is performed by one person, then for every two deep blows (breaths), he makes 15 pressures on the sternum, then again makes two blows and again repeats 15 pressures, etc. At least 60 pressures and 12 blows must be done per minute, t i.e. perform 72 manipulations, so the pace of resuscitation should be high.

Experience shows that most of the time is spent on artificial respiration. You can not delay the blowing: as soon as the chest of the victim has expanded, it must be stopped.

With the correct performance of external heart massage, each pressure on the sternum causes a pulse to appear in the arteries.

The caregivers should periodically monitor the correctness and effectiveness of external cardiac massage by the appearance of a pulse on the carotid or femoral arteries. When carrying out resuscitation by one person, he should interrupt the heart massage for 2-3 seconds every 2 minutes . to determine the pulse on the carotid artery.

If two people are involved in resuscitation, then the pulse on the carotid artery is controlled by the one who conducts artificial respiration. The appearance of a pulse during a massage break indicates the restoration of the activity of the heart (the presence of blood circulation). At the same time, heart massage should be immediately stopped, but artificial respiration should be continued until stable independent breathing appears. In the absence of a pulse, it is necessary to continue to massage the heart.

Artificial respiration and external cardiac massage should be carried out until the patient is restored to stable independent breathing and heart activity or until he is transferred to medical personnel.

A prolonged absence of a pulse with the appearance of other signs of revitalization of the body (spontaneous breathing, constriction of the pupils, attempts by the victim to move his arms and legs, etc.) is a sign of cardiac fibrillation. In these cases, it is necessary to continue to give artificial respiration and heart massage to the victim before transferring him to medical personnel.

4. First aid for various types of damage to the body

Wound:

When providing first aid in case of injury, the following rules must be strictly observed.

It is forbidden:

- wash the wound with water or some medicinal substance, cover it with powder and lubricate with ointments, as this prevents the wound from healing, causes suppuration and contributes to the entry of dirt into it from the surface of the skin;

- remove sand, earth, etc. from the wound, since it is impossible to remove everything that pollutes the wound;

- remove blood clots, clothing residues, etc. from the wound, as this can cause severe bleeding;

- wrap wounds with duct tape or put cobwebs on them to prevent infection with tetanus.

Need:

- Helping person wash their hands or smear fingers with iodine;

- carefully remove dirt from the skin around the wound, the cleaned area of the skin should be smeared with iodine;

- open the dressing bag in the first-aid kit in accordance with the instructions printed on its wrapper.

When applying a dressing, do not touch with your hands that part of it that should be applied directly to the wound.

If for some reason there was no dressing bag, a clean handkerchief, cloth, etc. can be used for dressing). Do not apply cotton wool directly to the wound. On the place of the tissue that is applied directly to the wound, drip iodine to get a spot larger than the wound, and then put the tissue on the wound;

- contact a medical organization as soon as possible, especially if the wound is contaminated with earth.

Bleeding

internal bleeding

Internal bleeding is recognized by the appearance of the victim (he turns pale; sticky sweat appears on the skin; breathing is frequent, intermittent, the pulse is frequent, of weak filling).

Need:

- lay the victim or give him a semi-sitting position;

- ensure complete peace;

- apply "cold" to the alleged place of bleeding;

- Immediately call a doctor or health worker.

It is forbidden:

- give the victim to drink if there is a suspicion of damage to the abdominal organs.

external bleeding

Need:

a) with mild bleeding:

- Lubricate the skin around the wound with iodine;

- Apply a dressing, cotton wool to the wound and bandage it tightly;

- without removing the applied dressing, apply additional layers of gauze, cotton wool on top of it and bandage it tightly if bleeding continues;

b) with severe bleeding:

- depending on the site of injury, to quickly stop the arteries to the underlying bone above the wound in the blood flow in the most effective places (temporal artery; occipital artery; carotid artery; subclavian artery; axillary artery; brachial artery; radial artery; ulnar artery; femoral artery ; femoral artery in the middle of the thigh; popliteal artery; dorsal artery of the foot; posterior tibial artery);

- in case of severe bleeding from a wounded limb, bend it in the joint above the wound site, if there is no fracture of this limb. Put a lump of cotton wool, gauze, etc. into the hole formed during bending, bend the joint to failure and fix the bend of the joint with a belt, scarf and other materials;

- in case of severe bleeding from a wounded limb, apply a tourniquet above the wound (closer to the body), wrapping the limb at the site of the tourniquet applian be applied by stretching (elastic special tourniquet) and twisting (tie, twisted scarf, towel);

- the victim with a tourniquet applied as soon as possible to deliver to a medical facility.

It is forbidden:

- excessively tighten the tourniquet, as you can damage the muscles, pinch the nerve fibers and cause paralysis of the limb;

- apply a tourniquet in warm weather for more than 2 hours, and in cold weather - for more than 1 hour, since there is a danger of tissue necrosis. If there is a need to leave the tourniquet longer, then you need to remove it for 10-15 minutes, after pressing the vessel with your finger above the bleeding site, and then apply it again to new skin areas.

Electric shock

Need:

- release the victim from the action of electric current as soon as possible;

- take measures to separate the victim from current-carrying parts, if there is no possibility of a quick shutdown of the electrical installation. To do this, you can: use any dry, non-conductive object (stick, board, rope, etc.); pull the victim away from current-carrying parts by his personal clothing, if it is dry and lags behind the body; cut the wire with an ax with a dry wooden handle; use an object that conducts electric current, wrapping it in the place of contact with the hands of the rescuer with dry cloth, felt, etc.;

- remove the victim from the danger zone at a distance of at least 8 m from the current-carrying part (wire);

- in accordance with the condition of the victim, provide first aid, including resuscitation (artificial respiration and chest compressions). Regardless of the subjective well-being of the victim, deliver him to a medical facility.

It is forbidden:

- forget about personal safety measures when assisting a victim of electric current. With extreme caution, you need to move in the area where the current-carrying part (wire, etc.) lies on the ground. It is necessary to move in the zone of spreading of the earth fault current using protective equipment for isolation from the ground (dielectric protective equipment, dry boards, etc.) or without the use of protective equipment, moving the feet on the ground and not tearing them one from the other.

Fractures, dislocations, bruises, sprains

For fractures:

- provide the victim with immobilization (creation of rest) of the broken bone;

- in case of open fractures, stop bleeding, apply a sterile bandage;

- apply a tire (standard or made from improvised material - plywood, boards, sticks, etc.). If there are no objects with which to immobilize the fracture site, it is bandaged to a healthy part of the body (an injured arm to the chest, an injured leg to a healthy one, etc.);

- in case of a closed fracture, leave a thin layer of clothing at the splint site. Remove the remaining layers of clothing or shoes without aggravating the position of the victim (for example, cut);

- apply cold to the fracture site to reduce pain;

- deliver the victim to a medical institution, creating a calm position of the injured part of the body during transportation and transfer to medical personnel.

It is forbidden:

- remove clothes and shoes from the victim in a natural way, if this leads to additional physical impact (squeezing, pressing) on the fracture site.

When dislocating, you need :

- ensure complete immobility of the damaged part with the help of a tire (standard or made from improvised material);

- apply "cold" to the injury site;

- deliver the victim to a medical facility with immobilization.

It is forbidden:

- try to set the dislocation yourself. This should only be done by a medical professional.

For injuries, you need:

- to create peace to the bruised place;

- apply "cold" to the site of injury;

- apply a tight bandage.

It is forbidden:

- lubricate the bruised area with iodine, rub and apply a warming compress.

When stretching ligaments, you need:

- bandage the injured limb tightly and provide it with peace;

- apply "cold" to the injury site;

- create conditions for ensuring blood circulation (raise the injured leg, hang the injured arm on a scarf to the neck).

It is forbidden:

- carry out procedures that can lead to heating of the injured area.

In case of a skull fracture (signs: bleeding from the ears and mouth, unconsciousness) and concussion (signs: headache, nausea, vomiting, loss of consciousness), you need to:

- eliminate the harmful effects of the situation (frost, heat, being on the carriageway, etc.);

- transfer the victim in compliance with the rules of safe transportation to a comfortable place;

- lay the victim on his back, in case of vomiting, turn his head to one side;

- fix the head on both sides with rollers from clothes;

- in the event of suffocation due to the retraction of the tongue, push the lower jaw forward and maintain it in this position;

- if there is a wound, apply a tight sterile bandage;

- put "cold";

- ensure complete rest until the doctor arrives;

- provide qualified medical assistance as soon as possible (call medical workers, provide appropriate transportation).

It is forbidden:

- give the victim any medication on their own;

- talk to the victim;

- Allow the victim to get up and move around.

In case of damage to the spine (signs: sharp pain in the spine, inability to bend your back and turn around), you need to:

- carefully, without lifting the victim, slip a wide board and other object similar in function under his back or turn the victim face down and strictly ensure that his body does not bend in any position (to avoid damage to the spinal cord);

- exclude any load on the muscles of the spine;

- provide complete peace of mind.

It is forbidden:

- turn the victim on his side, plant, put on his feet;

- lay on a soft, elastic bedding.

For burns:

- in case of burns of the 1st degree (redness and soreness of the skin), cut the clothes and shoes at the burnt place and carefully remove them, moisten the burnt place with alcohol, a weak solution of potassium permanganate and other cooling and disinfecting lotions, and then contact a medical institution;

- for burns of the II , III and IV degrees (blisters, necrosis of the skin and deep-lying tissues), apply a dry sterile bandage, wrap the affected area of the skin in a clean cloth, sheet, etc., seek medical help. If the burnt pieces of clothing are stuck to the burned skin, apply a sterile bandage over them;

- if the victim shows signs of shock, immediately give him 20 drops of valerian tincture or another similar remedy to drink;

- in case of eye burns, make cold lotions from a solution of boric acid (half a teaspoon of acid in a glass of water);

- in case of a chemical burn, wash the affected area with water, treat it with neutralizing solutions: in case of an acid burn - a solution of baking soda (1 teaspoon per glass of water); for alkali burns - a solution of boric acid (1 teaspoon per glass of water) or a solution of acetic acid (table vinegar, half diluted with water).

It is forbidden:

- touch the burned areas of the skin with your hands or lubricate them with ointments, fats, and other means;

- open bubbles;

- remove substances, materials, dirt, mastic, clothing, etc., adhering to the burned area.

For heat and sunstroke:

- quickly move the victim to a cool place;

- lay on your back, placing a bundle under your head (can be from clothes);

- unbutton or remove clothing that restricts breathing;

- moisten the head and chest with cold water;

- apply cold lotions to the surface of the skin, where many vessels are concentrated (forehead, parietal region, etc.);

- if the person is conscious, give cold tea, cold salted water to drink;

- if breathing is disturbed and there is no pulse, perform artificial respiration and external heart massage;

- provide peace;

- call an ambulance or take the victim to a medical facility (depending on the state of health).

It is forbidden:

- leave the victim unattended until the ambulance arrives and delivers him to a medical organization.

For food poisoning:

- give the victim to drink at least 3-4 glasses of water and a pink solution of potassium permanganate, followed by vomiting;

- repeat gastric lavage several times;

- give the victim activated charcoal;

- drink warm tea, put to bed, cover warmer (until the arrival of medical personnel);

- in case of violation of breathing and blood circulation, start artificial respiration and external heart massage.

It is forbidden:

- leave the victim unattended until the ambulance arrives and delivers him to a medical organization.

For frostbite:

- in case of slight freezing, immediately rub and heat the chilled area to eliminate vasospasm (excluding the possibility of damage to the skin, its injury);

- in case of loss of sensitivity, whitening of the skin, do not allow rapid warming of supercooled areas of the body when the victim is in the room, use heat-insulating dressings (cotton-gauze, woolen, etc.) on the affected integuments;

- ensure the immobility of supercooled arms, legs, body body (for this you can resort to splinting);

- leave a heat-insulating bandage until a feeling of heat appears and the sensitivity of the supercooled skin is restored, then give hot sweet tea to drink;

- in case of general hypothermia, the victim should be urgently delivered to the nearest medical institution without removing heat-insulating dressings and means (in particular, you should not remove icy shoes, you can only wrap your feet with a padded jacket, etc.).

It is forbidden:

- tear or pierce the formed blisters, as this threatens with suppuration.

If foreign bodies get into organs and tissues, you should contact a medical worker or a medical organization.

You can remove a foreign body yourself only if there is sufficient confidence that this can be done easily, completely and without serious consequences.

When drowning a person, you need:

- act thoughtfully, calmly and carefully;

- the person providing assistance should not only swim and dive well, but also know the methods of transporting the victim, be able to free himself from his seizures;

- urgently call an ambulance or a doctor;

- if possible, quickly clean the mouth and throat (open the mouth, remove the trapped sand, carefully pull out the tongue and fix it to the chin with a bandage or scarf, the ends of which are tied at the back of the head);

- remove water from the respiratory tract (put the victim on his knee with his stomach, head and legs hang down; beat on the back);

- if, after removing the water, the victim is unconscious, there is no pulse on the carotid arteries, does not breathe, start artificial respiration and external heart massage. Carry out until complete recovery of breathing or stop when there are obvious signs of death, which the doctor must ascertain;

- when restoring breathing and consciousness, wrap, warm, drink hot strong coffee, tea (give an adult 1-2 tablespoons of vodka);

- ensure complete rest until the doctor arrives.

It is forbidden:

- before the doctor arrives, leave the victim alone (without attention) even with a clear visible improvement in well-being.

When bitten

When bitten by snakes and poisonous insects, you need:

- suck the poison out of the wound as soon as possible (this procedure is not dangerous for the caregiver);

- limit the victim's mobility to slow the spread of the poison;

- provide plenty of fluids;

- deliver the victim to a medical organization. Transport only in the supine position.

It is forbidden:

- apply a tourniquet on the bitten limb;

- cauterize the bite site;

- make incisions for better discharge of poison;

- give the victim alcohol.

For animal bites:

- Lubricate the skin around the bite (scratch) with iodine;

- apply a sterile bandage;

- send the victim to a medical organization for vaccination against rabies.

When bitten or stung by insects (bees, wasps, etc.), you need to:

- remove the sting;

- put "cold" in place of the edema;

- give the victim a large amount of drink;

- in case of allergic reactions to insect venom, give the victim 1-2 tablets of diphenhydramine and 20-25 drops of cordiamine, cover the victim with warm heating pads and urgently deliver to a medical organization;

- in case of respiratory failure and cardiac arrest, perform artificial respiration and external heart massage.

It is forbidden:

- the victim should take alcohol, as it promotes vascular permeability, the poison lingers in the cells, swelling increases.