Materials on preparation for the OSCE station "Emergency assistance in pediatric practice" (tasks and algorithms for performing practical skills and abilities) for state attestation in the specialty 7.12010001 "General Medicine", 7.12010002 "Pediatrics", 222 "Medicine"

<table>
<tr><td colspan="4">Algorithm 1 (Scenario 1/2/3/4)
Anaphylaxis (shock).
Emergency care : first, second, and third line therapy</td></tr>
<tr><td colspan="4">Theoretical minimum. Anaphylaxis is a severe, life-threatening, generalized or systemic hypersensitivity reaction, which is characterized by a quick onset with life-threatening respiratory and circulatory disorders and is usually associated with manifestations on the skin and mucous membranes. The main triggers are food, drugs, and Hymenoptera venom poison, and in 20%, the trigger cannot be identified.

In patients with anaphylaxis, disturbances of respiratory and circulatory functions should be immediately evaluated. Death occurs because of damage to the upper respiratory tract, lower respiratory tract and/or due to cardiovascular disorders.</td></tr>
<tr><td colspan="4">Clinical criteria for the diagnosis of anaphylaxis.
<u>Anaphylaxis is very likely if there is one of three clinical options.</u>
<u>symptoms</u></td></tr>
<tr><td colspan="2"><u>Option A</u>: acute onset (from several minutes to several hours) with 3 of the following criteria:
1) damage to the skin, mucous membrane, or skin and mucous membrane at the same time (for example, generalized urtic aria, itching, swelling of the lips, tongue, tongue)

2) respiratory failure (for example, shortness of breath, wheezing, bronchospasm, stridor, decreased maximum expiratory flow, hypoxemia)
3) decrease in blood pressure or concomitant symptoms of target organ dysfunction (for example, hypotension, fainting, and urinary incontinence).</td><td><u>Option B:</u> immediately after contact with the suspected allergen (from several minutes to several hours), 2 or more of the following criteria are determined:

1) lesions of the skin, mucous membrane (for example, generalized urticaria, itching, swelling of the lips, tongue, tongue)
2) respiratory failure (for example, shortness of breath, wheezing, bronchospasm, stridor, decreased maximum expiratory flow, hypoxemia)
3) decrease in blood pressure;
4) concomitant symptoms of target organ dysfunction (e.g. hypotension, fainting, urinary incontinence)
5) persistent gastrointestinal symptoms (e.g. spastic abdominal pain, vomiting).</td><td><u>Option C:</u> low blood pressure after exposure to a known allergen for this patient (from several minutes to several hours):
a) Infants and children: low systolic BP (adjusted for age), or more than 30% reduction in systolic blood pressure *
* Low systolic blood pressure for children is defined as less than 70 mm Hg. for children from 1 month to 1 year; less than (70 mmHg + [2 * age]) for children from 1 to 10 years old less than 90 mmHg for children from 11 to 17 years old.
b) Adults: systolic blood pressure less than 90 mm Hg or a decrease of more than 30% compared to baseline pressure.</td></tr>
<tr><td colspan="2">Action plan depending on the patient's condition</td><td colspan="2">Exam Required Actions</td></tr>
<tr><td colspan="4">First line therapy</td></tr>
<tr><td>1</td><td>The first line of treatment with epinephrine intramuscularly is recommended.</td><td colspan="2">Take a syringe with adrenaline and say loudly "I inject a solution of adrenaline at a dose of 0.3 ml</td></tr>
</table>

		intramuscularly into the anterolateral region of the thigh." and loudly name the time of injection
Second line therapy		
2	**Patient's position with anaphylaxis:** **- instability of blood circulation: on the back with raised lower limbs** - respiratory failure: sitting position - unconscious patients: rescue position on the side	Put a pillow under patient's feet / move the foot end of the bed to an elevated position
3	**Oxygen** All patients with anaphylaxis should be given a high concentration of oxygen through a mask up to 6-8 liters per minute. The mask should be the appropriate size. It must be correctly and tightly put on the patient's face.	Put an oxygen mask on the patient's face and say loudly: "Flow 100% oxygen 6-8 l/min."
4	**Infusion support** Intravenous fluids should be administered to patients with cardiovascular instability. The solutions that should be chosen in this case are electrolytes, and they should be administered in boluses of 20 ml/kg (5-10 ml/kg in the first 5-10 minutes for an adult, 10 ml/kg for a child).	Take a saline solution in a soft vial and attach to the system for infusion and loudly say: "0.9% sodium chloride solution in a dose of 10 ml/kg, squeeze the bottle for a quick introduction"
Third line therapy		
5	**GCS** are widely used in anaphylaxis. Parenteral administration of GCS can be prescribed as soon as the first and second lines of treatment have been carried out.	Take a syringe with corticosteroids and say loudly: "I inject intravenously hydrocortisone 2 mg / kg (or methylprednisolone 1 mg / kg)"
6	**Monitoring** Patients with anaphylaxis need constant monitoring of vital functions and transfer to the intensive care unit. The duration of monitoring for anaphylaxis in the intensive care unit, followed by transfer to the department of allergology: - patients with respiratory failure - 6-8 hours; - patients with circulatory instability - 12-24 hours	Say it out loud: • Next, I check the vital functions according to the ABCDE algorithm • Hospitalization in the intensive care unit
Source: https://dec.gov.ua/wp-content/uploads/images/dodatki/2015_916_MA/2015_916_YKPMD_MA.pdf стор.53-58 https://apps.who.int/iris/bitstream/handle/10665/43206/9241546700.pdf;jsessionid=609C89EE024D12FAFDC6D981111620E5?sequence=1		

Algorithm 2 (Scenario 5/6/7/8)
Anaphylaxis after a bee sting.
Emergency care

Theoretical minimum. Anaphylaxis is a severe, life-threatening, generalized or systemic hypersensitivity reaction, which is characterized by a quick onset with life-threatening respiratory and circulatory disorders, and is usually associated with manifestations on the skin and mucous membranes. **The main triggers** are food, drugs, and Hymenoptera venom poison, and in 20%, the trigger cannot be identified.

In patients with anaphylaxis, disturbances of respiratory and circulatory functions should be immediately evaluated. Death occurs because of damage to the upper respiratory tract, lower respiratory tract and / or due to cardiovascular disorders.

Clinical criteria for the diagnosis of anaphylaxis.
Anaphylaxis is very likely if there is one of three clinical options.
symptoms

Option A: acute onset (from several minutes to several hours) with 3 of the following criteria:	**Option B:** immediately after contact with the suspected allergen (from several minutes to several hours), 2 or more of the following criteria are determined:	**Option C:** low blood pressure after exposure to a known allergen for this patient (from several minutes to several hours):
1) damage to the skin, mucous membrane, or skin and mucous membrane at the same time (for example, generalized urticaria, itching, swelling of the lips, tongue, tongue) **2) respiratory failure (for example, shortness of breath, wheezing, bronchospasm, stridor, decreased maximum expiratory flow, hypoxemia)** **3) decrease in blood pressure or concomitant symptoms of target organ dysfunction (for example, hypotension, fainting, urinary incontinence).**	1) lesions of the skin, mucous membrane (for example, generalized urticaria, itching, swelling of the lips, tongue, tongue) 2) respiratory failure (for example, shortness of breath, wheezing, bronchospasm, stridor, decreased maximum expiratory flow, hypoxemia) 3) decrease in blood pressure; 4) concomitant symptoms of target organ dysfunction (e.g. hypotension, fainting, urinary incontinence) 5) persistent gastrointestinal symptoms (e.g. spastic abdominal pain, vomiting).	a) Infants and children: low systolic BP (adjusted for age), or more than 30% reduction in systolic blood pressure * ** Low systolic blood pressure for children is defined as less than 70 mm Hg. for children from 1 month to 1 year; less than (70 mmHg + [2 * age]) for children from 1 to 10 years old less than 90 mmHg for children from 11 to 17 years old.* b) Adults: systolic blood pressure less than 90 mm Hg or a decrease of more than 30% compared to baseline pressure**.**

	Action plan depending on the patient's condition	**Exam Required Actions**
1	The **first line of treatment with epinephrine intramuscularly is** recommended**.**	Take a syringe with adrenaline and say loudly "I inject a solution of adrenaline at a dose of 0.3 ml intramuscularly into the anterolateral region of the thigh." and loudly name the time of injection
2	**Patient's position with anaphylaxis:** **- instability of blood circulation: on the back with raised lower limbs** - respiratory failure: sitting position - unconscious patients: rescue position on the side	Put a pillow under patient's feet / move the foot end of the bed to an elevated position

3	**Oxygen** All patients with anaphylaxis should be given a high concentration of oxygen through a mask up to 6-8 liters per minute. The mask should be the appropriate size. It must be correctly and tightly put on the patient's face.	Put an oxygen mask on the patient's face and say loudly: “Flow 100% oxygen 6-8 l/min.”
4	**Infusion support** Intravenous fluids should be administered to patients with cardiovascular instability. The solutions that should be chosen in this case are electrolytes, and they should be administered in boluses of 20 ml/kg (5-10 ml/kg in the first 5-10 minutes for an adult, 10 ml/kg for a child).	Take a saline solution in a soft vial and attach to the system for infusion and loudly say: “0.9% sodium chloride solution in a dose of 10 ml/kg, squeeze the bottle for a quick introduction”
5	**GCS** are widely used in anaphylaxis. Parenteral administration of GCS can be prescribed as soon as the first and second lines of treatment have been carried out.	Take a syringe with corticosteroids and say loudly: "I inject intravenously hydrocortisone 2 mg / kg (or methylprednisolone 1 mg / kg)"
6	H1 and H2 receptor blockers are used for anaphylaxis only to alleviate skin symptoms.	Take a syringe and say loudly: “I inject diphenhydramine at a dose of 1 mg / kg (maximum 50 mg)” intravenously
7	**Monitoring** Patients with anaphylaxis need constant monitoring of vital functions and transfer to the intensive care unit. The duration of monitoring for anaphylaxis in the intensive care unit, followed by transfer to the department of allergology: - patients with respiratory failure - 6-8 hours; - patients with circulatory instability - 12-24 hours	Say it out loud: • Next, I check the vital functions according to the ABCDE algorithm • Hospitalization in the intensive care unit
Source: https://dec.gov.ua/wp-content/uploads/images/dodatki/2015_916_MA/2015_916_YKPMD_MA.pdf стор.53-58		

Algorithm 3 (Scenario 9/10/11/12)

Bronchial asthma, attack period. Emergency care - to stabilize respiratory disorders and evaluate the steps: C - blood circulation D - neurological assessment; E - other symptoms.

Theoretical minimum. Exacerbation of bronchial asthma - episodes of increasing shortness of breath, cough, wheezing, or chest congestion, requiring changes in the usual regimen of therapy. The goals of treating BA exacerbations is to eliminate bronchial obstruction and hypoxemia as quickly as possible and to prevent further relapses.

Action plan depending on the patient's condition		**Exam Required Actions**	**Possible situations**
1	Children with life-threatening asthma or with SaO2 <94% should receive a high flow of oxygen through a tight-fitting mask or nasal cannula with a flow sufficient to achieve normal saturation.	Put an oxygen mask on the patient's face and say loudly: "The flow of 100% oxygen is 6-8 l / min."	
2	Inhaled beta 2-agonists are the first line of therapy for exacerbation of asthma. The following treatment regimen is recommended: in the 1st hour of therapy, 3 inhalations are given salbutamol	I carry out the first of 3 salbutamol inhalations (2 doses-puffs) using a spacer	
3	The goal of oxygen therapy during exacerbation of asthma is to maintain SpO2 in the range of 93-95%.	I put the oxygen mask on the patient's face again	
4		2 next inhalations I will spend at intervals of 20 minutes in 1 hour	
5	After the first inhalation of salbutamol, it is necessary to evaluate the immediate response according to the ABCDE approach.	After the first inhalation, I appreciate the immediate response - B: *breathing* : 1. RR 2. Respiratory effort 3. Retraction of the chest 4. Breathing noises 5. SpO 2	At this stage, it is necessary to determine further tactics depending on the examiner's response: **6A: There is an immediate answer. BH 28 / min** **SpO $_2$ 98%.** **6B: No immediate response. Respiratory assessment parameters have not changed**
6 А		Go to step 7.	
6 Б	Systemic corticosteroids are recommended for the treatment of all exacerbations of asthma, with the exception of mild severity attacks. Early use of steroids in emergency room can	I introduce prednisone (30 mg / ml) at a dose of 1 mg/kg iv slowly	If breathing has stabilized, go to step 7.

	reduce the need for hospitalization and prevent the recurrence of symptoms after initial treatment. The prescription of systemic corticosteroids is especially indicated if the initial therapy with inhaled β2-agonists did not provide long-term improvement.		
7	After stabilizing the B-breathing parameters according to the ABCDE approach, proceed to the examination of the next C- circulation.	I estimate blood circulation: 1. Heart rate 2. Central pulse 3. Peripheral pulse 4. Capillary filling 5. Skin color and temperature to the touch 6. Blood pressure	If blood circulation parameters are stable, go to step 8.
8	According to ABCDE algorithm, go to the examination of the next D - neurological assessment	I conduct a neurological assessment: 1. AVPU Scale (Alert, Voice, Pain, Unresponsible) 2. Cramps 3. Blood glucose	If the parameters of the neurological status are stable, go to step 9.
9	According to the ABCDE algorithm, proceed to the examination of the following parameters. E- exposure.	I evaluate exposure: 1. Body temperature 2. Skin rash 3. Trauma signs, lesions	If symptoms are absent: **emergency condition stabilized**
Source: - Уніфікований клінічний протокол первинної, вторинної (спеціалізованої) медичної допомоги «Бронхіальна астма у дітей», Наказ Міністерства охорони здоров'я України 08 жовтня 2013 року № 868; - https://ginasthma.org/wp-content/uploads/2019/06/GINA-2019-main-report-June-2019-wms.pdf			

Algorithm 4 (Scenario 13/14/15/16)
Severe pneumonia. Diagnosis of emergency, emergency care

Theoretical minimum. Pneumonia is usually caused by viruses or bacteria. Most serious episodes are caused by bacteria. It is usually not possible, however, to determine the specific cause by clinical features or chest X-ray appearance. Pneumonia is classified as very severe, severe or non-severe, based on the clinical features,
with specific treatment for each of them. Antibiotic therapy is needed in all cases. Severe and very severe pneumonia require additional treatment, such as oxygen, to be given in hospital. Severe pneumonia may require additional supportive care, such as oxygen therapy in a hospital setting.

The diagnosis :

Coughing or shortness of breath in combination with at least one of the following signs:

1. central cyanosis or SpO2 <90% with pulse oximetry;
2. severe respiratory failure (e.g., groaning, severe retraction of compliant places of the chest);
3. signs of pneumonia in combination with common signs of danger:

— inability to suckle or drink;
— retardation or lack of consciousness;
— convulsions.

4. in addition, some or all other signs of pneumonia may be present, such as:

— signs of pneumonia:
•• rapid breathing: age 2–11 months: ≥ 50 / min, age 1–5 years: ≥ 40 / min
—retraction of the lower chest edge (occurs when inhaling);
— auscultatory signs of pneumonia:
- decreased breath sounds
— bronchial breath sounds
— crackles
— abnormal vocal resonance (decreased over a pleural effusion, increased over lobar consolidation)
— pleural rub

Signs and symptoms of severe pneumonia	**Treatment**
Coughing or shortness of breath and: - SpO2 <90% or central cyanosis - Severe respiratory failure (e.g., groaning breath, pronounced retraction compliant places of the chest) - Signs of pneumonia with common signs of danger:(inability to suckle or drink, lethargy or decreased level of consciousness, convulsions)	- Hospitalize the child. - Give oxygen at a blood saturation of <90%. - Watch out for open respiratory tract. - Prescribe a suitable antibiotic. - In case of high fever, give antipyretics.

Action plan depending on the patient's condition		**Exam Required Actions**
1	Signs and symptoms of severe pneumonia: cough, SpO2 <90%, severe respiratory failure, signs of pneumonia with common signs of danger - lethargy or decreased level of consciousness.	Name the diagnosis: severe pneumonia
2	Ensure continuous oxygen supply, either as cylinders or oxygen concentrator, at all times. Give oxygen to all	Put an oxygen mask on the patient's face and say loudly: "The flow of 100% oxygen is 6-8 l / min."

	children whose blood saturation is <90%.	
3	If wheeze is present, give a rapid-acting bronchodilator	I carry out the first of 3 salbutamol inhalations (2 doses) using a spacer . I will carry out the following 2 inhalations with an interval of 20 minutes. within 1 hour
4	If there are signs of circulatory instability, move the child to a supine position with raised lower limbs	Lay the pillow under your feet / move the foot end of the bed to an elevated position
5	Intravenous fluids should be administered to patients with cardiovascular instability. The solutions that should be selected in this case are electrolytes, and they should be administered in boluses of 20 ml / kg (5-10 ml / kg in the first 5-10 minutes for an adult, 10 ml / kg for a child).	I take a saline solution in a soft bottle and attach to the system for infusion and say: "For a quick injection of a 0.9% sodium chloride solution at a dose of 10 ml / kg I squeeze the bottle"
6	Prescribe ampicillin and gentamicin intravenously. — Ampicillin 50 mg / kg every 6 hours for at least 5 days. — Gentamicin 7.5 mg / kg once a day for at least 5 days.	I introduce antibacterial drugs: 1. Ampicillin 50 mg / kg + 2. Gentamicin 7.5 mg / kg
7	If the child has fever (≥ 39 °C or ≥ 102.2 °F) which appears to be causing distress, give paracetamol.	I introduce an antipyretic drug - a solution of Paracetamol 15 mg / kg - iv
8	Admit the child to hospital.	I call the emergency medical team to hospitalize the child in the intensive care unit. I carry out an assessment of ABCE before the arrival of the ambulance crew

Source: - WHO Recommendations for management of common childhood conditions. 2012;
- The management of Community Aqcuered Pneumonia in Infants and Children older than 3 months of Age: Clinical Practice Guidelines by the Pediatric Infectious Diseases Society and the Infectious Diseases Society of America. 2011;
- Revised WHO Classification and Treatment of Childhood Pneumonia at Health Facilities. Evidence Summaries. Geneva. WHO. 2014;
https://apps.who.int/medicinedocs/documents/s22229ru/s22229ru.pdf
-
https://apps.who.int/iris/bitstream/handle/10665/43206/9241546700.pdf;jsessionid=609C89EE024D12FAFDC6D981111620E5?sequence=1

Algorithm 5 (Scenario 17/18/19/20)
Severe pneumonia with stridor. Diagnostics, emergency care

Theoretical minimum. Pneumonia is usually caused by viruses or bacteria. Most serious episodes are caused by bacteria. It is usually not possible, however, to determine the specific cause by clinical features or chest X-ray appearance. Pneumonia is classified as very severe, severe or non-severe, based on the clinical features,
with specific treatment for each of them. Antibiotic therapy is needed in all cases. Severe and very severe pneumonia require additional treatment, such as oxygen, to be given in hospital. Severe pneumonia may require additional supportive care, such as oxygen therapy in a hospital setting.
The diagnosis :
Coughing or shortness of breath in combination with at least one of the following signs:
- central cyanosis or SpO2 <90% with pulse oximetry;
- severe respiratory failure (e.g., groaning, severe retraction of compliant places of the chest);
- signs of pneumonia in combination with common signs of danger:
— inability to suckle or drink;
— retardation or lack of consciousness;
— convulsions.
In addition, some or all other signs of pneumonia may be present, such as:
— signs of pneumonia:
•• rapid breathing: age 2–11 months: ≥ 50 / min, age 1–5 years: ≥ 40 / min
—retraction of the lower chest edge (occurs when inhaling);
— auscultatory signs of pneumonia:
- decreased breath sounds
— bronchial breath sounds
— crackles
— abnormal vocal resonance (decreased over a pleural effusion, increased over lobar consolidation)
— pleural rub.

Signs and symptoms of severe pneumonia	**Treatment**
Coughing or shortness of breath and: - SpO2 <90% or central cyanosis - Severe respiratory failure (e.g., groaning breath, pronounced retraction compliant places of the chest) - Signs of pneumonia with common signs of danger:(inability to suckle or drink, lethargy or decreased level of consciousness, convulsions)	- Hospitalize the child. - Give oxygen at a blood saturation of <90%. - Watch out for open respiratory tract. - Prescribe a suitable antibiotic. - In case of high fever, give antipyretics.

Action plan depending on the patient's condition		**Exam Required Actions**
1	Signs and symptoms of severe pneumonia: cough, SpO2 <90%, severe respiratory failure, signs of pneumonia with common signs of danger - lethargy or decreased level of consciousness.	Name the diagnosis: severe pneumonia
2	Give a single dose of dexamethasone i/m	I inject dexamethosone 0.6 mg/kg i/m
3	Ensure continuous oxygen supply, either as cylinders or oxygen concentrator, at all times. Give oxygen to all children whose blood saturation is <90%.	Put an oxygen mask on the patient's face and say loudly: "The flow of 100% oxygen is 6-8 l/min."
4	Prescribe ampicillin and gentamicin intravenously.	I introduce antibacterial drugs: 1. Ampicillin 50 mg / kg + 2. Gentamicin 7.5 mg / kg

	— Ampicillin 50 mg / kg every 6 hours for at least 5 days. — Gentamicin 7.5 mg / kg once a day for at least 5 days.	
5	If the child has fever (≥ 39 °C or ≥ 102.2 °F) which appears to be causing distress, give paracetamol.	I introduce an antipyretic drug - a solution of Paracetamol 15 mg / kg - iv
6	Admit the child to hospital.	I call the emergency medical team to hospitalize the child in the intensive care unit. I carry out an assessment of ABCE before the arrival of the ambulance crew

Source: - WHO Recommendations for management of common childhood conditions. 2012;
- The management of Community Aqcuered Pneumonia in Infants and Children older than 3 months of Age: Clinical Practice Guidelines by the Pediatric Infectious Diseases Society and the Infectious Diseases Society of America. 2011;
- Revised WHO Classification and Treatment of Childhood Pneumonia at Health Facilities. Evidence Summaries. Geneva. WHO. 2014;
https://apps.who.int/medicinedocs/documents/s22229ru/s22229ru.pdf
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Algorithm 6 (Scenario 21)

Full-term newborn born inactive with clean amniotic fluid. Providing the first necessary actions and initial resuscitation measures to a full-term newborn born inactive with clean amniotic fluid

Theoretical minimum. The need to provide resuscitation care to a newborn can not always be predicted, however, high-risk labor increases this probability.

Determining the need for initial care for a child born after the outflow of clean amniotic fluid. The child needs medical care immediately after birth and should be separated from the mother, determined by one of three signs:

1) premature birth;

2) absent or inadequate independent breathing;

3) muscle tone is absent or significantly reduced.

Immediate action.

Immediately after the birth of the baby, the midwife (doctor; obstetrician; gynecologist) takes him in a warm diaper,

notices and announces the time of birth, transfers it to the mother's stomach and quickly begins to dry it with a diaper, evaluating the presence and adequacy of independent breathing and muscle tone.

Drying at this moment plays the role of initial tactile stimulation.

In the absence of spontaneous breathing, the presence of convulsive respiratory movements (breathing such as gasping) or decreased (absent) muscle tone, immediately:

• call for help;

• squeeze and cut the umbilical cord;

• inform the mother that the child will be helped;

• transfer the infant to a resuscitation table or other appropriate warm, clean, and dry surface;

• provide initial assistance;

• re-evaluate the condition of the child and act in accordance with the recommendations of the algorithm**.**

Initial care for a child born after pouring out clean amniotic fluid.

In a specific sequence, initial assistance steps include:

1) ensuring the correct position of the child on the resuscitation surface under the source of radiant heat and the release of the respiratory tract (if indicated)

2) the final drying of the newborn and re-ensuring the correct position of the head;

3) assessment of the **condition of the newborn** .

All of the above activities (determining the need for resuscitation and the initial steps of assistance) must be completed in about 30 seconds

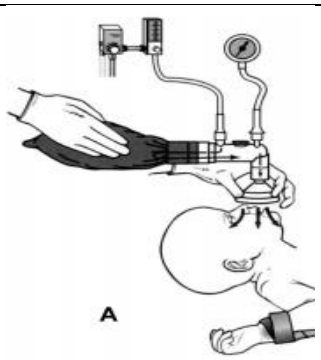
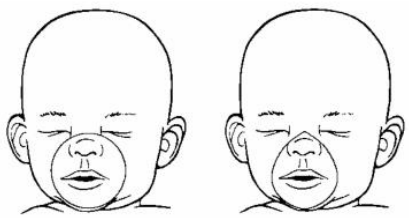
Initial resuscitation measures (stage B - mechanical ventilation or filling the lungs with the help of a resuscitation mask)

Indications:

1) gas-type apnea / respiration; OR

2) heart rate <100 / min. after providing initial assistance

Action plan depending on the patient's condition		**Exam Required Actions**	**Possible situations**
		Immediate action	
1	Call for help	Call for help - say loudly: "Help is needed, everyone is here!"	
2	Inform the mother, the child will be assisted	Inform the mother the mother that the child will be helped - say out loud: "Your child does not breathe, we provide the necessary help"	
		Initial help	
3	Ensure the correct position.	Put the baby on the resuscitation table and ensure the correct position of the head on the surface	

4		Place a flat-folded diaper under the shoulders and back	
5	In the presence of apnea or respiratory failure, suck the contents of the upper airwayswith a rubber bulb or sterile disposable catheter	Suck the contents of the upper respiratory tract with a rubber bulb in the mouth-nose sequence	
6	Dry additionally if necessary.	Carry out the final drying of the child - rub the back and feet for a few seconds	
7	Throw away wet diapers.	Remove (discard) the wet diaper	
8	Again ensure the correct position.	Re-ensure the correct position of the head by placing a flat-folded diaper under the shoulders and back	
9	Assess the condition of the child and decide what to do next:	Say loudly what indicators you need to evaluate according to the help algorithm:	
9.1	Breath	Assess for breathing.	**not breathing**
9.2	Heart rate	Rate heart rate in 6 seconds	**Heart rate 7 in 6 sec**
Initial resuscitation measures (stage B - IVL bag and mask)			
10	Assess the level of oxygenation using pulse oximetry The sensor on the mannequin's right hand	Say loudly: "Connect the pulse oximeter sensor to the child's right hand" *(do not fix it on the handle with your own hand, therefore, another participant in resuscitation measures does this)*	**Fastens the sensor on the mannequin's right hand**
11		Stand behind or on the side of the baby's head	
12		Put the mask on the child's face from the chin to the bridge of the nose	
13		Perform mechanical ventilation with an Ambu bag and mask for 30 seconds	
14	Continue ventilation for 30 s.	Carry out 20-30 compressions of the Ambu bag with 4-5 fingers, hold the mask on your face	

15	Keep up the rhythm	Speak loudly for 30 seconds. "Inhale two - three - inhale - two ..."	
16	Assess the condition of the child	After 30 seconds, say loudly: “It is necessary to assess the condition of the child: heart rate, respiration, saturation, skin color, muscle tone, reflex (Arshavsky or pharyngeal)	Heart rate 100 SpO 2 - 97%

Source: - Уніфікований клінічний протокол «Початкова, реанімаційна і післяреанімаційна допомога новонародженим в Україні», затверджений наказом МОЗ України від 28 березня 2014 року № 225
- https://apps.who.int/medicinedocs/documents/s22229ru/s22229ru.pdf
-
https://apps.who.int/iris/bitstream/handle/10665/43206/9241546700.pdf;jsessionid=609C89EE024D12FAFDC6D981111620E5?sequence=1

Algorithm 7 (Scenario 22/23/24/25)
Hypovolemic shock/severe dehydration. Emergency care

Theoretical minimum. Children with severe dehydration require rapid IV rehydration with close monitoring, which is followed by oral rehydration once the child starts to improve sufficiently.

Diagnosis. If any two of the following signs are present in a child with diarrhoea, severe dehydration should be diagnosed:

1)lethargy or unconsciousness
2)sunken eyes
3)skin pinch goes back very slowly (2 seconds or more)
4)not able to drink or drinks poorly

Treatment. Children with severe dehydration should be given rapid IV rehydration followed by oral rehydration therapy.

➤ Start IV fluids immediately. While the drip is being set up, give ORS solution if the child can drink.

Note: The best IV fluid solution is Ringer's lactate Solution (also called Hartmann's Solution for Injection). If Ringer's lactate is not available, normal saline solution (0.9% NaCl) can be used. 5% glucose (dextrose) solution on its own is not effective and should not be used.

Give 100 ml/kg of the chosen solution according to the scheme:

Age	**First, give 30 ml/kg in:**	**Then, give 70 ml/kg in:**
< 12 months old	1 hour	5 hours
≥12 months old	30 minutes	2,5 hours

	Action plan depending on the patient's condition	**Exam Required Actions**
1.	Ensure continuous oxygen supply, either as cylinders or oxygen concentrator, at all times. Give oxygen to all children whose blood saturation is <90%.	Put an oxygen mask on the patient's face and say loudly: "The flow of 100% oxygen is 6-8 l/min."
2.	If there are signs of circulatory instability, move the child to a supine position with raised lower limbs	Lay the pillow under your feet / move the foot end of the bed to an elevated position
3.	Start injecting intravenous fluids immediately using isotonic solutions.	Take the Ringer-Lactate solution in a soft bottle and say loudly: "I provide venous access, begin the infusion of the Ringer- Lactate solution at a dose of 10 ml/kg. I'm squeezing a bottle for quick (in 10 min.) introduction of a solution " "
4.		Loudly say: "I continue the infusion of Ringer-lactate solution at a dose of 20 ml / kg over the next 50 minutes. according to plan B for the treatment of severe dehydration (total 30 ml / kg for the first hour of treatment)
5.	If the child has fever (≥ 39 °C or ≥ 102.2 °F) which appears to be causing distress, give paracetamol.	I introduce an antipyretic drug - a solution of Paracetamol 7.5 mg/kg (15 mg/kg for a child over 10 kg) - iv
6.	Refer URGENTLY to hospital	Call the emergency medical team to hospitalize the child in the intensive care unit. I carry out an assessment of ABCE before the arrival of the ambulance crew

Source: - Уніфікований клінічний протокол первинної медичної допомоги «Інтегроване ведення хвороб дитячого віку», Наказ Міністерства охорониздоров'я України 12.05.2016 № 438
- https://apps.who.int/medicinedocs/documents/s22229ru/s22229ru.pdf
https://apps.who.int/iris/bitstream/handle/10665/43206/9241546700.pdf;jsessionid=609C89EE024D12FAFDC6D981111620E5?sequence=1

Algorithm 8 (Scenario 26/27/28/29)
Meningococcemia, toxic shock. Diagnosis and immediate care for meningococcemia

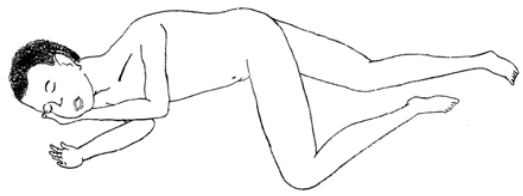
Theoretical minimum. Clinical diagnostic criteria for meningococcemia:
- sudden, acute onset with an increase in body temperature to 38-40 °C;
- severe intoxication syndrome: general weakness, headache, muscle pain, pallor of the skin;
- in most patients, after a few hours, a spotty-papular rash appears on the skin without a certain localization. After a few hours, hemorrhagic elements of a rash ranging in size from 1-2 mm to several centimeters form on the skin of the buttocks, thighs, lower legs, lower body. Later, necrosis forms in the center of the largest elements of the rash.
- hemorrhages in the sclera, mucous membranes of the oropharynx, nasal, gastric bleeding can be observed
- in fulminant forms - manifestations of toxic shock quickly increase, hypostatic cyanotic spots form on the body.

Providing medical care to children with severe forms of meningococcemia at the prehospital stage. In severe forms of meningococcal infection with a high probability of an unfavorable outcome of the disease, infusion therapy should begin already at the stage of transportation to the hospital, and the introduction of drugs is considered unacceptable.

At the prehospital stage, peripheral venous access should be provided, infusion therapy with saline or colloidal solutions should be started, antibiotics should be administered, if acute adrenal insufficiency is suspected, it should be administered intravenously by the administration of GCS, if necessary, antipyretics, anticonvulsant therapy**.**

Action plan depending on the patient's condition		**Exam Required Actions**
1	If there are signs of circulatory instability, move the child to a supine position with raised lower limbs	Lay the pillow under your feet/move the foot end of the bed to an elevated position
2	Oxygen therapy with moistened oxygen with FiO2 0.35-0.4.	I put on an oxygen mask on the patient's face and say: "Flow of 100% oxygen 6-8 l/min"
3	If there are signs of shock, provide reliable venous access in 3-5 minutes	Loudly say: "I provide venous access and start infusion "
4	Start infusion therapy with isotonic saline solutions (0.9% sodium chloride solution or sodium chloride + potassium chloride + calcium chloride dihydrate + sodium lactate solution) in a volume of 20 ml/kg body weight in 20 minutes.	Take saline in a soft bottle and attach to the system for infusion. Loudly say: "I inject an intravenous solution of 0.9% NaCl 20 ml/kg in 20 minutes."
5	Glucocorticosteroids only intravenously (prednisone, hydrocortisone) at a dose of 10 mg/kg (dose calculation for prednisone).	Take a syringe with prednisone. Loudly say: "I inject intravenously prednisone 10 mg / kg"
6	Antibiotic therapy - cefotaxime at a single dose of 75 mg/kg or ceftriaxone a single dose of 50 mg/kg iv. infusion.	Take a syringe with ceftriaxone. Loudly say : "I am injecting ceftriaxone (first dose) at a dose of 50 mg/kg
7	Antipyretic therapy (if necessary)	Take a vial with a solution of Paracetamol 10 mg / ml, attach to the infusion system. Loudly say: "I am introducing an antipyretic drug Paracetamol 7.5 mg/kg (15 mg/kg for a child over 10 kg) - iv"
8	Assessment of the severity of the child's condition. The optimal is the hospitalization of the patient in a specialized infectious diseases hospital.	Say it out loud: • Next, I check the vital functions according to the ABCDE algorithm • Urgent hospitalization in the intensive care unit of a specialized hospital

Source: - Наказ МОЗ України N 737 від 12.10.2009. Протокол лікування менінгококемії у дітей. (http://babykrok.com.ua/upload/intext/pediatric/737.pdf)
- https://apps.who.int/medicinedocs/documents/s22229ru/s22229ru.pdf
https://apps.who.int/iris/bitstream/handle/10665/43206/9241546700.pdf;jsessionid=609C89EE024D12FAFDC6D981111620E5?sequence=1

Algorithm 9 (Scenario 30/31/32/33) Febrile seizers in a child of 2 years. Emergency care		
Theoretical minimum. Febrile seizures are convulsions accompanied by fever (body temperature ≥ 38 ° C) in the absence of infection of the central nervous system in newborns and children over the age of 6 months up to 5 years. Simple febrile seizures are defined as primary generalized seizures lasting less than 15 minutes and do not recur within 24 hours. Complex (complex) febrile convulsions - as focal, prolonged (≥ 15 min) and / or relapsing within 24 hours.		
Action plan depending on the patient's condition		**Exam Required Actions**
1	After evaluating a patient with seizures > 5 minutes, a dose of diazepam should be administered	I take a syringe with diazepam , say "I introduce: diazepam 0.5% 0.5 mg/ kg i/v slowly **or** i/m "
2	 If there is no suspicion of a neck injury: ➤ Turn the child on the side to reduce risk of aspiration. ➤ Keep the neck slightly extended and stabilize by placing cheek on one hand ➤ Bend one leg to stabilize the body position	I put the child on his side in a safe position
3	Provide a constant supply of oxygen from oxygen cylinders or an oxygen concentrator.	I put on an oxygen mask on the patient's face and say: "Flow of 100% oxygen 6-8 l/min"
4	If the child has fever (≥ 39 °C or ≥ 102.2 °F) which appears to be causing distress, give paracetamol.	Take a vial with a solution of Paracetamol 10 mg/ml, attach to the infusion system. Loudly say: "I am introducing an antipyretic drug Paracetamol solution of 15 mg/kg by drip
5	Refer to hospital	Call the emergency medical team to hospitalize the child to the hospital. I carry out an assessment of ABCE before the arrival of the ambulance crew
6	Assessment of the severity of the child's condition according to the ABCDE algorithm.	Checking the airways
7А.	Check your airway	**Free.** I pass to the following assessment (item 8. B- breathing) **OR**
7.Б	Check airways	**There are many mucous secretions in the airways.** Remove mucus from the upper respiratory tract using a rubber aspirator
8	According to ABCDE algorithm, proceed to the examination of the following parameters B- breathing	Evaluate B - breathing: 1. RR 2. Respiratory efforts 3. Retraction of the chest 4. Respiratory noises 5. SpO 2
9	After checking the B-breathing parameters according to the ABCDE approach, proceed to	I estimate blood circulation: 1. Heart rate

	the examination of C-blood circulation system.	2. Central pulse 3. Peripheral pulse 4. Capillary filling 5. The color and temperature of the skin to the touch 6. Blood pressure
10	According to ABCDE algorithm, go to the examination of the next system D - neurological assessment	I conduct a neurological assessment: 1. AVPU scale (Alert, Voice, Pain,Unresponsible) 2. The presence of seizures 3. Blood glucose level
11	According to the ABCDE algorithm, proceed to the examination of the following parameters. E- exposure.	I evaluate exposure: 1. Body temperature 2. Skin rash 3.Trauma signs, lesions
Source: - Уніфікований клінічний протокол первинної медичної допомоги «Інтегроване ведення хвороб дитячого віку», Наказ Міністерства охороніздоров'я України 12.05.2016 № 438 - WHO Recommendations for management of common childhood conditions. 2012 - https://apps.who.int/medicinedocs/documents/s22229ru/s22229ru.pdf https://apps.who.int/iris/bitstream/handle/10665/43206/9241546700.pdf;jsessionid=609C89EE024D12FAFDC6D981111620E5?sequence=1		

Algorithm 10 (Scenario 18/19)
Hypoglycemic coma, emergency prehospital care

Theoretical minimum. Hypoglycemia is a condition caused by an absolute or relative excess of insulin.

Diagnostic criteria

Causes	**Clinical**	**Paraclinical**
Unplanned or heavy physical activity. Skipping a meal. An overdose of insulin (incl. suicidal attempts). Gastroenteritis. Alcohol intake by adolescents without increased food intake. Impaired liver and kidney function.	Anamnesis: the presence of provoking factors Sudden loss of consciousness The skin is moderately moist. Normal tissue turgor BP is normal or slightly increased Pulse is frequent, normal Pupils response to light saved Muscle hypertonicity Stem symptoms	Low blood glucose level All cases of glycemia below 4 mmol/L should be considered as hypoglycemia (since it may be asymptomatic).

Treatment

Treatment of mild and moderate hypoglycemia is carried out on an outpatient basis, severe hypoglycemia (coma) - in the department of endocrinology or intensive care and intensive care.

Mild hypoglycemia (1 degree)	**Moderate hypoglycemia (grade 2)**	**Severe hypoglycemia (grade 3)** (in a person who is unconscious or having impaired consciousness and swallowing)
10-20 g of "fast" carbohydrates (1-2 slices of bread, glucose in tablets, concentrated fruit juices, sugary drinks, etc.).	10-20 g of "fast" carbohydrates (1-2 slices of bread)	**Outside a hospital:** children under 5 years of age - 0.5 mg glucagon intramuscularly or subcutaneously children over 5 years of age - 1.0 mg of glucagon intramuscularly or subcutaneously In the absence of glucagon → IV infusion of a 10% glucose solution of 2 ml/kg bolus . In hospital - intravenous bolus injection of 2 ml/kg of 10% solution

	Action plan depending on the patient's condition	**Exam Required Actions**	**Possible situations**
1	Considering the history, clinical and paraclinical criteria	The diagnosis: Type I diabetes mellitus, hypoglycemic coma	
2	Prescribe Glucagon 1 mg/m	I introduce: **Glucagon 1 mg** at a dose of 1 ml i / m **OR**	If it is not possible to use this drug, it is possible to go to the next item
3	Bolus administration of 10% glucose solution 2 ml/kg iv	I provide venous access, enter: 10% glucose solution 2 ml/kg iv bolus	
4	Hospitalize baby	The emergency medical center team is called to hospitalize the child in the intensive care unit.	

5	Assessment of the severity of the condition of the child according to the ABCDE algorithm. Check the patency of the upper respiratory tract	Then I check the vital functions using the ABCDE algorithm Check breathing ways	Free
6	According to ABCDE algorithm, proceed to the examination of the following parameters B- breathing	Evaluate B - breathing: 1. RR 2. Respiratory efforts 3. Retraction of the chest 4. Respiratory noises 5. SpO 2	RR – 22 SpO2 - 97%
7	After checking the B-breathing parameters according to the ABCDE approach, proceed to the examination of the next C- circulation.	I assess blood circulation: 1. Heart rate 2. Central pulse 3. Peripheral pulse 4. Capillary filling 5. Skin color and temperature to the touch 6. Blood pressure	Stable blood circulation
8	According to ABCDE algorithm, go to the examination of the next D - neurological assessment	I conduct a neurological assessment: 1. AVPU Scale (Alert, Voice, Pain, Unresponsible) 2. Cramps 3. Blood glucose	The child regained consciousness. Glucose - 3.6 mmol / L
9	According to the ABCDE algorithm, proceed to the examination of the following parameters. E- exposure.	I evaluate exposure: 1. Body temperature 2. Skin rash 3. Trauma signs, lesions	Body temperature 36.7, clean skin, no other symptoms. The condition of the child has stabilized.
Source: Наказ МОЗ України 07.10.2013 № 864 «Зміни до протокола надання медичної допомоги дітям, хворим на цукровий діабет, затвердженого наказом МОЗ України від 27 квітня 2006 року № 254.» https://apps.who.int/iris/bitstream/handle/10665/43206/9241546700.pdf;jsessionid=609C89EE024D12FAFDC6D981111620E5?sequence=1			

Algorithm 11 (Scenario 38/39)
Diabetic ketoacidosis II , provision of emergency pre-hospital aid

Theoretical minimum. DKA - is uncompensated diabetes with an absolute insulin deficiency and increased level of contrinsulin hormones. The most common cause of death in DKA is cerebral edema**.**

Diagnostic criteria for DKA

DKA I, ketosis	DKA II, DKA III, diabetic coma
thirst, polyuria, weight loss , dry skin and mucous membranes, weakness, headache, drowsiness, smell of acetone in the air, decreased appetite, nausea. The degree of dehydration is NOT more than 5%	nausea, vomiting, abdominal pain, tongue coated brown patina, dizziness, considerable dehydration (loss of up to 10-12% of body weight), tachycardia, hypotension, decreased muscle tone, tendon reflexes, tone eyeballs, hypothermia, oliguria , passing into anuria, loss of consciousness, Kussmaul breathing, pungent smell of acetone in exhaled air. The degree of dehydration is more than 5%

Criteria for diagnosing the severity of DKA

diagnostic criteria	***diabetic ketoacidosis***		
	I	**II**	**III**
Blood glucose (mmol / l)	> 14	> 14	> 14
pH of arterial blood	7,25 - 7,3	7,0 - 7,24	<7,0
Blood Bicarbonate (meq/ L)	15 - 18	10 - 15	<10
urine ketones	positive	positive	positive
serum ketones	positive	positive	positive
anionic difference	> 10	> 12	> 12
osmolarity	different	different	different
state of consciousness	anxiety	anxiety or drowsiness	stupor or coma

Treatment.
The main directions:
1.Rehydration. It should conduct more slowly - over 24 - 48 hours, when necessary - longer (prevention brain edema).
The temperature of the solutions is 37.0ºC.
Types of solutions:
- 0.9% solution of NaCl (at hyperosmolarity - 0.45% solution of NaCl)
- after reducing glycemia to 12-15 mmol - replacing on solutions containing glucose (0.9% or 0.45% NaCl with 5% solution of glucose).

The volume of necessary fluids = Liquid deficiency (ml) + supporting daily volume (ml)
Liquid deficiency (ml) = degree of dehydration (%) x body weight (kg)
In connection with the risk of overhydration: in the first 4 hours - volume of liquid not more than 50 ml/kg, and of a first day - not more than 4 liters/m^2 surface of the body.
2. Elimination of insulin deficiency.
Insulin (only short- acting) is administered in the mode of small doses, continuously intravenously dropwise diluted in 0.9% NaCl (1 Unit/ml). Infusion carried out with the use Y shaped adapter, in parallel with the other liquids (insulin must NOT be added to the liquid, what are introduced). The rate of decrease in glycemia should not be fast - not faster than 4-5 mmol/l per hour. During the first day of treatment NOT should reduce blood glucose levels below 13 mmmol/L. Switch to subcutaneous administration of insulin only for the conditions of lowering glycemia <14 mmol / l and at normal values of acid-base balance.
3. Restoring the normal extra- and intracellular composition of electrolytes
4. Recovery of stocks of glucose (glycogen) in the body

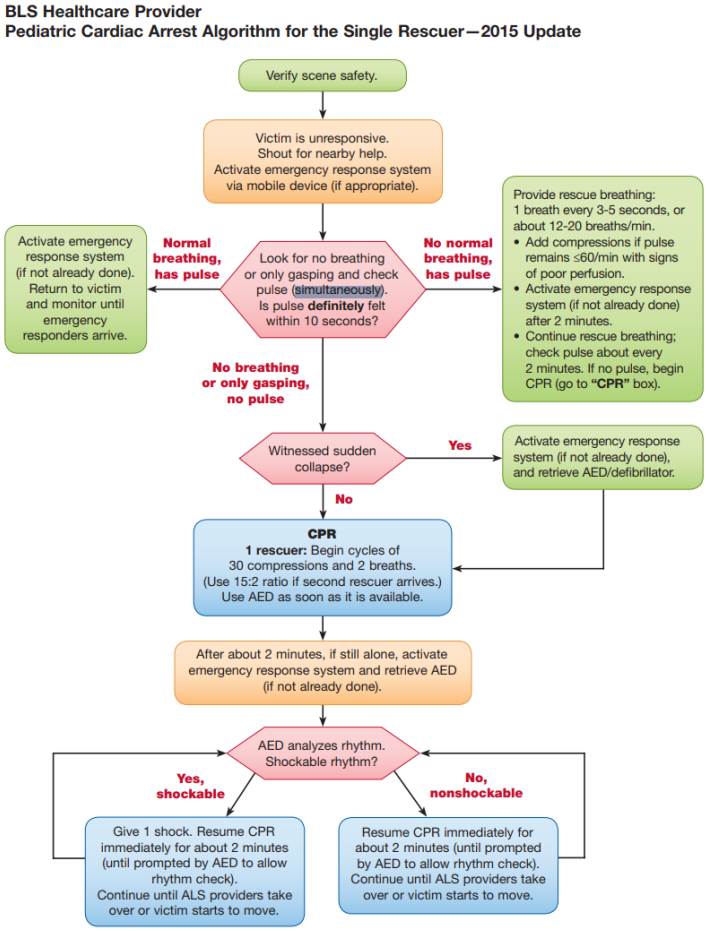
5. Restoration of the acid-base balance
6. Diagnosis and treatment of pathological conditions that caused coma
7. Treatment and prevention:
- a syndrome of the disseminated inside vascular coagulation (DIC)
- infectious complications
- iatrogenic second hypoglycemia
- and toxicity
- about brain tech

8. Correction of hemostasis
9.Conducting therapeutic measures aimed at restoring and supporting functions internal organs (heart, kidney, lungs, etc.).

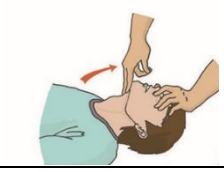
Action plan depending on the patient's condition		**Exam Required Actions**	**Possible situations**
1	Provide a constant supply of oxygen from oxygen cylinders or an oxygen concentrator.	I put on an oxygen mask on the patient's face and say: "Flow of 100% oxygen 6-8 l/min"	
2	If there are signs of circulatory instability, move the child to a supine position with raised lower limbs	Lay the pillow under your feet / move the foot end of the bed to an elevated position	
3	Shelter of the patient	Cover the child with rescue blanket	
4	Heated infusion solutions to 37.0 ° C before administration.	Take a saline solution in a soft bottle and attach to the system for infusion and say: "I introduce a 0.9% sodium chloride solution heated to 37.0 ° C at a dose of 20 ml/ kg for the first hour of infusion" ml/kg for the first hour of infusion"	
5	The mode of administration in the first hour: 20 ml/kg. Second hour: 10 ml/kg. Third hour onwards: 5 ml/kg.	In the second hour of therapy, the infusion volume will be 10 ml/kg	
	Before the introduction of insulin 50 IU it must be dissolved in 50 ml of 0.9% NaCl, and 1 IU of such a solution contains 1 IU of insulin.	Before starting insulin therapy, I dissolve 50 IU of short-acting insulin in 50 ml of 0.9% NaCl	
	The recommended initial dose of insulin 0.1 units / kg / hour.	Prepared for administration insulin solution is connected to the infusion system through the adapter "I administer a short-acting isulin I / O slowly dropwise at a dose of 0.1 U / kg / h"	
	Assessment of the severity of the condition of the child according to the ABCDE algorithm. Check the patency of the upper respiratory tract	Then I check the vital functions using the ABCDE algorithm Check breathing ways	Free
6	According to ABCDE algorithm, proceed to the examination of the following parameters B- breathing	Evaluate B - breathing: 1. RR 2. Respiratory efforts 3. Retraction of the chest	RR - 50 SpO2 - 95%

		4. Respiratory noises 5. SpO 2	
7	After checking the B-breathing parameters according to the ABCDE approach, proceed to the examination of the next C-circulation.	I assess blood circulation: 1. Heart rate 2. Central pulse 3. Peripheral pulse 4. Capillary filling 5. Skin color and temperature to the touch 6. Blood pressure	Stable blood circulation
8	According to ABCDE algorithm, go to the examination of the next D - neurological assessment	I conduct a neurological assessment: 1. AVPU Scale (Alert, Voice, Pain, Unresponsible) 2. Cramps 3. Blood glucose	The child responds to voice, there are no seizures. The level of glucose s blood - 16.2 mmol / l
9	According to the ABCDE algorithm, proceed to the examination of the following parameters. E- exposure.	I evaluate exposure: 1. Body temperature 2. Skin rash 3. Trauma signs, lesions	The body temperature - 36.7, the skin is clean, the other symptoms are absent
10	Patients with DKA require treatment in the department of resuscitation and intensive therapy	Urgent hospitalization in the department of intensive care unit	
Source: Наказ МОЗ України 07.10.2013 № 864 «Зміни до протокола надання медичної допомоги дітям, хворим на цукровий діабет, затвердженого наказом МОЗ України від 27 квітня 2006 року № 254.» https://apps.who.int/iris/bitstream/handle/10665/43206/9241546700.pdf;jsessionid=609C89EE024D12FAFDC6D981111620E5?sequence=1			

Algorithm 12 (Scenario 40)
Cardiac arrest in a child at an outpatient clinic. The defibrillator is not available



№	Exam Required Actions	Execution technique	Possible situations
1.	**Verify scene safety**	Look around	There is no danger
2.	**Provide security (if necessary) Ensure the correct position of the child on the couch.**	Horizontal position on the back. ECR 2021 guidelines do not require moving the patient to the floor or rigid laying.	
3.	**Reaction check** •	• Fix the child's head • Squeeze the palm of his hand (or stimulate a reaction by rubbing the phalanges of your fingers on the sternum of the child) • Speak loudly to the child: “Do you need help? Can you hear me?"	There is no reaction. Go to item 4
4.	**Shout for nearby help: "Help, the child is bad!"**		

5.	**Ensure the patency of the upper respiratory tract.**	• Hold the baby's head • Place the palm of one hand on the child's forehead, grab the child's lower jaw with two fingers of the other hand, moderately throwing back the head, opening the airways 	
6.	**Look for no breathing**	• Bring the ear to the lips of the child. • With your eyes, observe the excursion of the child's chest, counting up to 10 	There is no breath. Go to item 7
7.	**Calling the emergency team by phone. Specify:** • Coordinates of the scene • Number of victims • Gender • Approximate age • Condition of the victim • Presumptive cause of the condition • Amount of assistance	*For example: address; one victim, child 5 years old, does not breathe, starting CPR*	Ambulance call accepted. Go to item 8
8.	**Assess the presence of blood circulation**	• Assess the presence of a central pulse on the carotid artery with two or three fingers. • Count up to 10 aloud	The pulse is not detected. Go to item 9
9.	Free the baby's chest and abdomen from clothing		
10.	**Start CPR**	For a child 5 years old: • Place the base of the palm of one hand on the lower half of the baby's sternum. • Hands should be upright, not bend at the elbow, palms should not come off the chest of the child. • Depth of compressions - 2-3 cm (not less than 1/3 of the anteroposterior chest diameter).	

		• Allow the chest to fully extend after each compression. • Minimum intervals between compressions. • During the compressions, hold the baby's head with the other hand. • Read the number of compressions aloud. 	
11.	**After 30 chest compressions, begin ventilation with a bag and mask (200 continuous chest compressions without mechanical ventilation are permissible)**	• Stand at the side of the child. Use a mask with an Ambu bag of the appropriate size, firmly attaching it to the child's face, holding the lower jaw with 2 fingers. • Compress the Ambu bag with 5 fingers. Control the force of compression until the chest is visibly lifted • Wait 1 sec. • Allow the chest to collapse as you exhale • Repeat aloud: "Inhale, pause, pause, inhale!"	
12.	**Performing CPR cycles within 2 minutes (30: 2)**		

Unregulated and unsafe actions
Compression was not performed at all
Shaking baby
Peripheral pulse check
Testing pupil response to light
Clarification of unnecessary questions, search for medical documentation
Search for unregulated devices
Search in the pockets of the victim for medicine, search for handkerchiefs, bandages, rags
Ventilation without protective equipment
Other unregulated and unsafe actions

The general impression of the expert: "Emergency medical (first) aid was provided unprofessionally"
Source: Atkins D. L. et al. Part 11: pediatric basic life support and cardiopulmonary resuscitation quality: 2015 American Heart Association guidelines update for cardiopulmonary resuscitation and emergency cardiovascular care //Circulation. – 2015. – Т. 132. – №. 18_suppl_2. – С. S519-S525. **https://www.cercp.org/images/stories/recursos/Guias%202015/Guidelines-RCP-AHA-2015-Full.pdf**