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Federal State Budget Educational Institution
of Higher Education
Pacific State Medical University
of the Ministry of Health of the Russian Federation

APPROVED BY
Head of the Department of
Anesthesiology, Resuscitation, Intensive
Care, and Emergency Medical Care
_____ / Shumatov V.B./
"15th" of April 2025

COLLECTION OF ASSESSMENT TOOLS
Б1.В.12 Medical care during emergencies and disasters of the basic educational program of Higher Education

Specialty	**31.05.01 General Medicine for international students (in English)** (code, name)
Degree	Specialist's degree
Profile	02 "Healthcare" (in the field of providing primary health care to the population in medical organizations: polyclinics, outpatient clinics, inpatient/outpatient facilities of the municipal health care system)
Mode of study	**Full-time**
Period of mastering the BEP	**6 years** (nominal length of study)
Department	of Anesthesiology, Resuscitation, Intensive Care, and Emergency Medical Care

Vladivostok, 2025

1. INTRODUCTION

1.1. **Collection of Assessment Tools** is a document that regulates the format, content, and types of assessment tools for continuous assessment, interim examination and final (state final) examination, and graded criteria for each type of assessment tools.

1.2. Assessment tools allows to evaluate the development of universal, general professional, and professional competencies (UCs, GPCs and PCs respectively) outlined in Federal State Educational Standard of Higher Education and defined in the basic educational program of higher education for the specialty 31.05.01 General Medicine for international students (in English), profile 02 "Healthcare" (in the field of providing primary health care to the population in medical organizations: polyclinics, outpatient clinics, inpatient/outpatient facilities of the municipal health care system).

(BEP HE for the 31.05.01 General Medicine for international students (in English) specialty, section 3 Learning Outcomes Requirements of the Basic Educational Program of Higher Education)

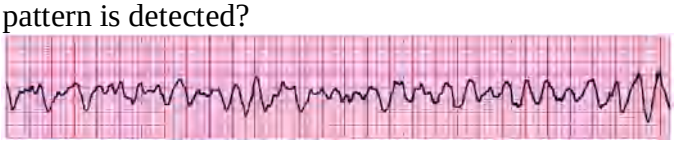
2. DOCUMENT BODY

2.1. Types of Assessment, Formats of Assessment Tools

No.	**Types of assessment**	**Assessment Tools Format**
1	**Continuous assessment**	**Tests**
2	**Interim assessment**	**Mini-Case Studies**
		Checklists

3. The contents of assessment tools for continuous and interim examination are prepared by the teacher of the course

1. Tests for continuous assessment on the “Advanced cardiopulmonary resuscitation during emergencies and disasters” topic

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.01	General Medicine for international students (in English)
C	UC-8	Is able to create and maintain safe living conditions and workplace while preserving the natural environment and ensuring sustainable societal development, including under the danger and occurrence of emergencies or military conflicts
C	PC-1	Ability and readiness to provide emergency medical care in conditions requiring urgent medical intervention
C	PC-6	Ability and readiness to select a type of patient routing based on current medical care procedures
F	A/01.7	Providing emergency and urgent medical care to the population
I		**ANSWER LEVEL 1 TEST QUESTIONS (ONE CORRECT ANSWER)**
		1. What is the only correct action when the following ECG pattern is detected?  1) intubation of the trachea and tracheobronchial toilet +2) primary electrical defibrillation 3) establishing venous access and administering 1 mg of

adrenaline
4) creating a venous access and administering 300 mg of cordarone

2. When using a biphasic defibrillator on an adult, how much energy for a shock is used?
1) 150J
2) 200J
3) 300J
+4) 360J

3. When using a defibrillator on a child, how much energy for a shock is used?
1) 40 J/kg
2) 30 J/kg
3) 20 J/kg
+4) 2 to 10 J/kg

4. Which medication that can be used during CPR in adults is administered in doses of 1.5 mg/kg and 0.75 mg/kg?
1) epinephrine
+2) lidocaine
3) amiodarone
4) magnesium sulfate

5. Which amount is correct for a single dose of adrenaline used during CPR in an adult patient?
+1) 0.01 mg/kg
2) 0.1 mg/kg
3) 1 mg/kg
4) 1.5 mg/kg

6. What action should be taken in the first 5 minutes after detecting the type of circulatory arrest shown below?



1) perform electrical defibrillation
+2) administer adrenaline
3) administer lidocaine
4) administer magnesia

7. What is the single dose of amiodarone for children?
1) 1.5 mg/kg
2) 3 mg/kg
3) 4.5 mg/kg
+4) 5mg/kg

8. Which of the following medications is used for chemical cardioversion?
1) epinephrine
2) atropine
+3) amiodarone
4) naloxone

		9. What is the respiratory rate per minute in intubated children? 1) 6 2) 10 3) 12 +4) 25 10. What is the initial oxygen concentration used in artificial ventilation in premature infants during resuscitation? +1) 21% 2) 60% 3) 85% 4) 100%

2. Tests for continuous assessment on the “Modern methods of anesthesia” topic

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.01	General Medicine for international students (in English)
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C	PC-1	Ability and readiness to provide emergency medical care in conditions requiring urgent medical intervention
C	PC-6	Ability and readiness to select a type of patient routing based on current medical care procedures
F	A/01.7	Providing emergency and urgent medical care to the population
I		**ANSWER LEVEL 1 TEST QUESTIONS (ONE CORRECT ANSWER)**
		1. What is the name of a pathological condition in which non-damaging stimuluis is perceived as painful? 1) hyperalgesia +2) hyperesthesia 3) allodynia 4) anesthesia 2. What is excessive response to nociceptive stimulus called? 1) hyperaesthesia 2) dysesthesia +3) hyperalgesia 4) allodynia 3. What is the cause of visceral pain? 1) soft tissue injury 2) injury of bones, fascia +3) injury of hollow and parenchymal organs 4) injuries of the skin, subcutaneous tissue, and mucous membranes 4. What is taken into account during subjective assessment of the adequacy of analgesia?

		1) state of hemodynamics: BP, PS +2) Visual Analogue Scale (VAS) 3) indicators of respiratory function: RR, V_T, SpO_2 4) laboratory assay of stress hormones 5. Which of the following substances is an opioid analgesic? 1) ketoprofen 2) ketamine +3) buprenorphine 4) paracetamol 5) meloxicam 6. Which of the following substances is an agonist of opioid receptors? +1) morphine, Omnopon (papaveretum), fentanyl, Promedol, Tramal (Tramadol) 2) morphine, Omnopon (papaveretum), fentanyl, Promedol, butorphanol 3) morphine, Omnopon (papaveretum), fentanyl, Promedol, naloxone 7. Which of the following analgesics do NOT have a central analgesic effect? 1) opioids 2) acetaminophen derivatives +3) NSAIDs 4) NMDA receptor antagonists 8. What is NOT included in the basic principles of postoperative pain management? 1) continuity +2) analgesics are prescribed step-by-step, from weaker to stronger ones 3) preventive approach 9. Which physiological process is NOT included in nociception? 1) transduction +2) transcriptions 3) modulation 4) perception 5) transmission 10. What is the most effective analgesia regimen after highly invasive surgeries? 1) paracetamol / NSAIDs + systemic administration of an opioid analgesic +2) paracetamol / NSAIDs + systemic patient-controlled administration of an opioid analgesic 3) paracetamol / NSAIDs + systemic administration of an opioid analgesic following a strict dosing regimen

3. Tests for continuous assessment on the “Principles and methods of intensive care in patients in shock” topic

	Code	Competence description / name of labor function / name of work activity / text
S	31.05.01	General Medicine for international students (in English)
C	UC-8	Is able to create and maintain safe living conditions and workplace while preserving the natural environment and ensuring sustainable societal development, including under the danger and occurrence of emergencies or military conflicts
C	PC-1	Ability and readiness to provide emergency medical care in conditions requiring urgent medical intervention
C	PC-6	Ability and readiness to select a type of patient routing based on current medical care procedures
F	A/01.7	Providing emergency and urgent medical care to the population
I		**ANSWER LEVEL 1 TEST QUESTIONS (ONE CORRECT ANSWER)**
		1. What is an indicator of shock at the pre-hospital stage? +1) the presence of tachycardia and shock windows 2) a sharp drop in blood pressure 3) altered level of consciousness 4) impaired capillary blood flow 2. What comprises signs of impaired peripheral blood flow? +1) "spotted", "mottled" skin; decrease in skin temperature 2) decrease in the level of hourly diuresis 3) impaired mental status 4) decrease in the level of average blood pressure 3. What comprises early signs of traumatic shock? +1) tachycardia, tachypnea, decreased capillary blood flow, decreased pulse pressure 2) tachycardia and decrease in systolic blood pressure 3) decrease in the level of hourly diuresis 4) altered level of consciousness 4. What time of re-filling of capillaries of the nail bed is characteristic of shock? +1) more than 5 seconds 2) less than 5 seconds 3) less than 3 seconds 4) 2 to 5 seconds 5. What volume of blood loss causes a decrease in systemic blood pressure? +1) 30% CBV or more 2) up to 20-25% of CBV 3) up to 15-20% of CBV 4) up to 10% of CBV and more 6. What method is used to increase preload at pre-hospital stage? +1) infusion therapy

		2) administration of vasopressor drugs 3) administration of prednisolone 4) administration of sodium bicarbonate 7. What is the first step in infusion therapy for patients in traumatic shock? +1) tests aimed at predicting fluid responsiveness 2) administration of colloidal solutions 3) correction of metabolic acidosis 4) administration of albumin solutions 8. What is the purpose of the of restitution (salvation) stage of targeted infusion therapy? +1) saving the patient's life 2) restoring the organ function 3) supporting the organ function 4) restoration of organ function 9. What should the infusion therapy for patients in traumatic shock begin with? +1) administration of electrolyte solutions 2) administration of colloidal solutions 3) administration of blood products 4) administration of artificial oxygen carriers 10. What are criteria for the effectiveness of shock treatment? +1) decrease in heart rate less bellow 100 per minute, increase in the diuresis more than 0.5 ml/kg per hour 2) heart rate at 120-130 per minute, hourly diuresis at 0.5 ml/kg per hour 3) systolic BP 90-100 mm Hg 4) restoration of the level of consciousness to 14-15 points on the Glasgow Coma Scale

4. Tests for continuous assessment on the “Medical aid in case of chest or abdomen injury” topic

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.01	General Medicine for international students (in English)
C	UC-8	Is able to create and maintain safe living conditions and workplace while preserving the natural environment and ensuring sustainable societal development, including under the danger and occurrence of emergencies or military conflicts
C	PC-1	Ability and readiness to provide emergency medical care in conditions requiring urgent medical intervention
C	PC-6	Ability and readiness to select a type of patient routing based on current medical care procedures
F	A/01.7	Providing emergency and urgent medical care to the population
I		**ANSWER LEVEL 1 TEST QUESTIONS (ONE CORRECT ANSWER)**
		1. What is detected on the side of the pneumothorax during percussion?

+1) high tympanite
2) abrupt dullness of the sound
3) no changes
4) shortening the sound
5) all of the above

2. What is characteristic of pressure in the pleural cavity on the side of the tension pneumothorax?
1) close to atmospheric pressure
+2) above atmospheric on exhale
3) below atmospheric on exhale
4) below atmospheric on inhale
5) all of the above is possible

3. What out of the following is a sign of hemothorax?
1) shortness of breath, no breath sounds can be heard on the affected side, box sound during percussion
+2) dulled percussion sound, weakened breath sounds, progressive drop in blood pressure
3) crepitation upon applying pressure on the skin of the chest, difficulty breathing
4) pleural friction rub sound, pain when breathing

4. What does the emergency medical aid in case of tension pneumothorax begin with?
1) tracheostomy
+2) puncture and drainage with aspiration of air from the pleural cavity
3) intercostal nerve block
4) phrenic nerve block

5. What state of a hollow organ of the abdominal cavity most often leads to its rupture?
1) empty
+2) full
3) mobile
4) collapsed
5) atonic

6. What organ injury is the Kehr's sign indicative of?
1) stomach injury
2) pancreas injury
+3) spleen injury
4) small intestine injury

7. Which examination method provides the most information in case of closed abdomen injury leading to bladder rupture?
1) survey X-ray of the abdominal cavity
2) laparoscopy
+3) contrast cystography
4) irrigoscopy
5) urinalysis

8. What should be done to the organ that fell out in case of

		traumatic eventration before transportation? 1) reduce it into the abdominal cavity 2) leave it without changing anything +3) cover with moist sterile gauze pads 4) treat its surface with peroxide 9. What is characterized by the absence of hepatic dullness in patients with blunt abdominal trauma? 1) spleen rupture 2) pancreas injury +3) rupture of a hollow organ (stomach, intestine) 4) acute appendicitis 10. What condition that may occur due to a closed injury of the chest and abdomen is the hardest to identify at the pre-hospital stage? +1) diaphragm rupture 2) contusion of the thoracic and lumbar spine 3) stomach rupture 4) hemopericardium 5) kidney injury and retroperitoneal hematoma

5. Tests for continuous assessment on the "Crush syndrome. Principles of providing medical aid in case of multiple traumatic injuries and polytrauma" topic

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.01	General Medicine for international students (in English)
C	UC-8	Is able to create and maintain safe living conditions and workplace while preserving the natural environment and ensuring sustainable societal development, including under the danger and occurrence of emergencies or military conflicts
C	PC-1	Ability and readiness to provide emergency medical care in conditions requiring urgent medical intervention
C	PC-6	Ability and readiness to select a type of patient routing based on current medical care procedures
F	A/01.7	Providing emergency and urgent medical care to the population
I		**ANSWER LEVEL 1 TEST QUESTIONS (ONE CORRECT ANSWER)**
		1. What is crush syndrome? 1) tissue injury with its partial rupture but maintained anatomical continuity +2) traumatic soft tissue injury caused by crushing, resulting in cessation of blood flow and ischemia 3) damage to organs and tissues without compromising the integrity of the skin 4) a sharp decrease in all vital functions as the result of an injury 2. What characterizes the acute renal failure stage of crush syndrome? 1) hemoconcentration 2) unstable hemodynamics psycho-emotional stress

+3) hemodilution

3. What are the main pathogenesis mechanisms that begin crush syndrome?
1) emotional stress
+2) massive prolonged crushing of soft tissues and compression of major blood vessels
3) severe pain syndrome
4) prolonged liver ischemia

4. When sorting victims according to the SMART triage method, what is assessed first?
1) pulse on the carotid artery
2) consciousness
+3) breathing
4) pulse on the radial artery

5. What is indicated for an injured person who retains spontaneous breathing with the rate of over 30 per 1 minute according to the SMART triage technique for multiple casualties?
+1) immediate assistance and transportation to the hospital
2) stabilization of the condition and transportation as a secondary priority
3) nothing as this person can get to the hospital on their own
4) no assistance is provided as this person is considered deceased

6. What is fundamental rule of providing medical aid in accordance with the ATLS protocol?
+1) golden hour rule
2) grab-and-go rule
3) rules of medical ethics
4) rules of medical deontology

7. What does the letter A stands for in the ABCDE rule of ATLS?
+1) airway management with immobilization of the cervical spine
2) breathing and ventilation
3) circulation with bleeding control
4) disability/neurologic assessment

8. What letter of the ABCDE ATLS rule stands for hemodynamics assessment and bleeding control?
+1) C
2) A
3) B
4) D

9. What does the letter D stands for in the ABCDE rule of ATLS?
+1) disability/neurologic assessment

		2) circulation with bleeding control 3) immobilization of the cervical spine 4) detailed examination of the victim 10. What does the “three catheters” rule entail? +1) inserting a gastric tube, a urinary catheter, and a venous catheter 2) inserting catheters in two peripheral veins and inserting a urinary catheter 3) inserting a urinary catheter, a nasogastric tube, and a flatus tube 4) inserting a central and peripheral venous catheters, urinary catheter

6. Tests for continuous assessment on the “Medical care in case of poisoning during emergencies and disasters” topic

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.01	General Medicine for international students (in English)
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C	PC-6	Ability and readiness to select a type of patient routing based on current medical care procedures
F	A/01.7	Providing emergency and urgent medical care to the population
I		**ANSWER LEVEL 1 TEST QUESTIONS (ONE CORRECT ANSWER)**
		1. What is arsine? 1) hydrogen sulphide +2) arsenic trihydride 3) hydrocyanic acid 4) carbon monoxide 2. What causes carboxyhemoglobin to form? 1) hydrogen sulphide 2) arsenic trihydride 3) hydrocyanic acid +4) carbon monoxide 3. Poisoning with which substance is a contraindication for administration of unithiol as an antidote? 1) hydrogen sulfide +2) arsenic trihydride 3) hydrocyanic acid 4) carbon monoxide 4. Poisoning with which substance is an indication for using a specific antidote - Acyzol? 1) hydrogen sulfide

		2) arsenic trihydride 3) hydrocyanic acid +4) carbon monoxide 5. Which of the following substances has a hemolytic effect? 1) hydrogen sulphide +2) arsenic trihydride 3) hydrocyanic acid 4) carbon monoxide 6. Exposure to which substance causes primary injury of the alveolar-capillary membrane? 1) organophosphorus compounds 2) cyanides +3) chlorine 4) CO_2 7. Exposure to which gasses is an indication for early oxygen support? 1) organophosphorus compounds +2) ammonia +3) chlorine 8. What condition develops during the third phase of toxic pulmonary edema? 1) "White hypoxia" +2) "Blue hypoxia" 3) "Gray hypoxia" 4) "Black hypoxia" 9. What condition develops during the fourth phase of toxic pulmonary edema? 1) "White hypoxia" 2) "Blue hypoxia" +3) "Gray hypoxia" 4) "Black hypoxia" 10. Poisoning with which substance is an indication for use of methylene blue as an antidote? 1) carbon monoxide +2) nitric acid 3) phosgene 4) organophosphorus compounds

Assessment criteria

“Very good” - more than 90% correct answers of questions of every level
“Good” - 80-89% correct answers of questions of every level
“Satisfactory” - 70-79% correct answers of questions of every level
“Unsatisfactory” - less than 70% correct answers of questions of every level

Standardized case studies and checklists for **Б1.В.12 Medical care during emergencies and disasters** course

Case Study No.1

	Code	Competence description / name of labor function / name of work activity / text
S	31.05.01	General Medicine for international students (in English)
C	UC-8	Is able to create and maintain safe living conditions and workplace while preserving the natural environment and ensuring sustainable societal development, including under the danger and occurrence of emergencies or military conflicts
C	PC-1	Ability and readiness to provide emergency medical care in conditions requiring urgent medical intervention
C	PC-6	Ability and readiness to select a type of patient routing based on current medical care procedures
F	A/01.7	Providing emergency and urgent medical care to the population
I		**READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS** A 45-year-old man lost consciousness and fell down at work. A day prior he presented at an outpatient clinic with pain behind the sternum with typical radiation into the left arm and shoulder. Strict bed rest, use of nitrates and antiplatelet agents were recommended. The patient did not follow these recommendations and went to work of his own accord. Physical examination results: loss of consciousness, lack of breathing and pulse on the carotid arteries. The skin is pale, no reflexes can be identified.
Q	1	Question: What is your diagnosis?
Q	2	Question: What are possible causes of this condition?
Q	3	Question: What emergency medical aid must be provided?
Q	4	Question: Will you perform CPR in this case and if so, for how long?
Q	5	Question: What algorithm of CPR should be followed in this case?

Case Study No.1 Checklist

	Code	Competence description / name of labor function / name of work activity / text
S	31.05.01	General Medicine for international students (in English)
C	UC-8	Is able to create and maintain safe living conditions and workplace while preserving the natural environment and ensuring sustainable societal development, including under the danger and occurrence of emergencies or military conflicts
C	PC-1	Ability and readiness to provide emergency medical care in conditions requiring urgent medical intervention
C	PC-6	Ability and readiness to select a type of patient routing based on current medical care procedures
F	A/01.7	Providing emergency and urgent medical care to the population
I		**READ THE PROVIDED CASE DESCRIPTION AND**

		GIVE DETAILED ANSWERS TO THE QUESTIONS A 45-year-old man lost consciousness and fell down at work. A day prior he presented at an outpatient clinic with pain behind the sternum with typical radiation into the left arm and shoulder. Strict bed rest, use of nitrates and antiplatelet agents were recommended. The patient did not follow these recommendations and went to work of his own accord. Physical examination results: loss of consciousness, lack of breathing and pulse on the carotid arteries. The skin is pale, no reflexes can be identified.
Q	1	Question: What is your diagnosis?
A		Possible answers: 1. Clinical death 2. Biological death. 3. Syncope 4. Cardiogenic shock. 5. Myocardial infarction
R2	Very good	Correct answer (1) is given
R0	Fail	Incorrect answer (2,3,4, or 5) is given
Q	2	Question: What are possible causes of this condition?
A		Possible answers: 1. The patient developed pulmonary edema caused by acute myocardial infarction 2. The patient experienced circulatory arrest and clinical death caused by acute myocardial infarction. 3. PE 4. Ischemic stroke
R2	Very good	Correct answer (2) is given
R0	Fail	Incorrect answer (1,3, or 4) is given
Q	3	Question: What emergency medical aid must be provided?
A		Possible answers: 1. Assess the environmental hazard and insure one's safety. 2. Call an ambulance. 3. Do not touch the victim before the arrival of the ambulance. 4. Appoint an assistant and send them to bring the Automated External Defibrillator (AED). 5. Start chest compressions. 6. Follow chest compressions with mouth-to-mouth breathing. 7. Since this is a clinical death, no medical aid is necessary. 8. Unbutton the collar of the shirt of the patient, open the windows, and hold smelling salts (aromatic ammonia) under his nose. 9. Perform a precordial thump. 10. First, perform mouth-to-mouth breathing, and then switch to chest compressions. 11. Perform CPR
R2	Very good	Full answer given (points 1, 2, 4, 5, 6, and 11 are given)
R1	Good/Satisfactory	Incomplete answer given (“Good” grade –points 1, 2, 4, 5, and 6 are given “Satisfactory” grade – points 2, 5, and 6 are given)

R0	Fail	Incorrect answer (3, 7, 8, 9, 10) is given
Q	4	Question: Will you perform CPR in this case and if so, for how long?
A		Possible answers: 1. Since this is a case of clinical death, I will not conduct CPR 2. 10 minutes 3. Until the ambulance arrives 4. Until the pulse on carotid artery, breathing, and consciousness are restored 5. 15 minutes 6. 30 minutes.
R2	Very good	Full answer given (points 3, 4, and 6 are given)
R1	Good/Satisfactory	Incomplete answer given ("Good" grade –points 3 and 6 are given "Satisfactory" grade – point 6 is given)
R0	Fail	Incorrect answer (1,2,5) is given
Q	5	Question: What algorithm of CPR should be followed in this case?
A		Possible answers: 1.A-B-C 2. C-A-B-D 3. A-D-B-C 4. C-D-A-B 5. C-A-B 6. A-B-C-D
R2	Very good	Full answer given (points 2 and 5 are given)
R1	Good/Satisfactory	Incomplete answer given ("Good" grade –point 2 or 5 is given "Satisfactory" grade – no criteria)
R0	Fail	Incorrect answer (1,3,4,6) is given

Case Study No.2

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.01	General Medicine for international students (in English)
C	UC-8	Is able to create and maintain safe living conditions and workplace while preserving the natural environment and ensuring sustainable societal development, including under the danger and occurrence of emergencies or military conflicts
C	PC-1	Ability and readiness to provide emergency medical care in conditions requiring urgent medical intervention
C	PC-6	Ability and readiness to select a type of patient routing based on current medical care procedures
F	A/01.7	Providing emergency and urgent medical care to the population
I		**READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS** A patient diagnosed with progressing "melanoma of the back skin" and brain metastases receives extended release ketoprofen twice a day for pain relief. Recently, the pain has increased. The attending physician prescribed intramuscular injections of

		tramadol.
Q	1	Question: Is this the right choice of medication?
Q	2	Question: Is it the right way to administer the medication?
Q	3	Question: What group of medications does tramadol belong to?
Q	4	Question: What is your cause of actions in case the pain will continue to get worse?
Q	5	Question: In order to increase the effectiveness of tramadol, what other treatment would you prescribe to the patient?

Case Study No.2 Checklist

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.01	General Medicine for international students (in English)
C	UC-8	Is able to create and maintain safe living conditions and workplace while preserving the natural environment and ensuring sustainable societal development, including under the danger and occurrence of emergencies or military conflicts
C	PC-1	Ability and readiness to provide emergency medical care in conditions requiring urgent medical intervention
C	PC-6	Ability and readiness to select a type of patient routing based on current medical care procedures
F	A/01.7	Providing emergency and urgent medical care to the population
I		**READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS** A patient diagnosed with progressing "melanoma of the back skin" and brain metastases receives extended release ketoprofen twice a day for pain relief. Recently, the pain has increased. The attending physician prescribed intramuscular injections of tramadol.
Q	1	Question: Is this the right choice of medication?
A		Possible answers: 1. No, stronger analgesics are needed 2. Yes, the prescribed treatment aligns with the guidelines 3. Yes, but it is necessary to take results of VAS into account and it is possible that the analgesia may need to be revised
R2	Very good	Full answer given (point 3 is given)
R1	Good/Satisfactory	Incomplete answer given (“Good” grade –point 2 is given “Satisfactory” grade – no criteria)
R0	Fail	Incorrect answer (1) is given
Q	2	Question: Is it the right way to administer the medication?
A		Possible answers: 1. Yes, because it will act faster 2. No, because it is better to prescribe it in tablets with extended release 3. No, because parenteral administration is more difficult technically 4. No, because parenteral administration has a higher likelihood of complications

R2	Very good	Full answer given (points 2, 3, and 4 are given)
R1	Good/Satisfactory	Incomplete answer given (“Good” grade –points 2 and 3 are given “Satisfactory” grade – point 2 is given)
R0	Fail	Incorrect answer (1) is given
Q	3	Question: What group of medications does tramadol belong to?
A		Possible answers: 1. Local anesthetics 2. Anxiolytics 3. NSAIDs 4. Opioid narcotic analgesics 5. Sedatives 6. Antidepressants
R2	Very good	Correct answer (4) is given
R0	Fail	Incorrect answer (1, 2, 3, 5, 6) is given
Q	4	Question: What is your cause of actions in case the pain will continue to get worse?
A		Possible answers: 1. Suggest to endure the pain 2. Go to the next stage of analgesia according to the guidelines. 3. Switch to stronger opioids. 4. Add antidepressants
R2	Very good	Full answer given (points 2, 3, and 4 are given)
R1	Good/Satisfactory	Incomplete answer given (“Good” grade –points 2 and 3 are given “Satisfactory” grade – point 2 is given)
R0	Fail	Incorrect answer (1) is given
Q	5	Question: In order to increase the effectiveness of tramadol, what other treatment would you prescribe to the patient?
A		Possible answers: 1. Infusion therapy 2. Administer antibacterial agents 3. Adjuvant therapy 4. Administer sedatives
R2	Very good	Full answer given (point 3 is given)
R1	Good/Satisfactory	Incomplete answer given (“Good” grade – no criteria “Satisfactory” grade – point 4 is given)
R0	Fail	Incorrect answer (1, 2) is given

Case Study No.3

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.01	General Medicine for international students (in English)
C	UC-8	Is able to create and maintain safe living conditions and workplace while preserving the natural environment and ensuring sustainable societal development, including under the danger and occurrence of emergencies or military conflicts
C	PC-1	Ability and readiness to provide emergency medical care in conditions requiring urgent medical intervention

C	PC-6	Ability and readiness to select a type of patient routing based on current medical care procedures
F	A/01.7	Providing emergency and urgent medical care to the population
I		**READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS** A 55-year-old patient with an open fracture of the diaphysis of the thigh was taken to the emergency room of a hospital. Bleeding from the wound is practically undetectable, blood pressure is 100/70 mm Hg. PS is 100 beats/min. Hb is 120 g/L.
Q	1	Question: What is the sequence of actions of the emergency room doctor?
Q	2	Question: Where should the patient be hospitalized to?
Q	3	Question: What is the estimated volume of blood loss?
Q	4	Question: What treatment measures should be implemented in this case?
Q	5	Question: What should be used for infusion therapy in this case?

Case Study No.3 Checklist

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.01	General Medicine for international students (in English)
C	UC-8	Is able to create and maintain safe living conditions and workplace while preserving the natural environment and ensuring sustainable societal development, including under the danger and occurrence of emergencies or military conflicts
C	PC-1	Ability and readiness to provide emergency medical care in conditions requiring urgent medical intervention
C	PC-6	Ability and readiness to select a type of patient routing based on current medical care procedures
F	A/01.7	Providing emergency and urgent medical care to the population
I		**READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS** A 55-year-old patient with an open fracture of the diaphysis of the thigh was taken to the emergency room of a hospital. Bleeding from the wound is practically undetectable, blood pressure is 100/70 mm Hg. PS is 100 beats/min. Hb is 120 g/L.
Q	1	Question: What is the sequence of actions of the emergency room doctor?
A		Possible answers: 1. Administer NSAIDs, transfer to the Traumatology Department. 2. Administer narcotic analgesics and transport the patient to the intensive care unit. 3. Seek a consultation of a traumatologist; perform primary surgical debridement of the wounds. 4. Establish venous access, initiate infusion therapy.
R2	Very good	Full answer given (points 2, 3, and 4 are given)
R1	Good/Satisfactory	Incomplete answer given

		(“Good” grade –points 2 and 4 are given “Satisfactory” grade – point 2 is given)
R0	Fail	Incorrect answer (1) is given
Q	2	Question: Where should the patient be hospitalized to?
A		Possible answers: 1. The patient should be hospitalized in the general surgery department. 2. The patient should be hospitalized in the traumatology department of a multidisciplinary hospital. 3. The patient should be hospitalized in the anti-shock ward or intensive care unit.
R2	Very good	Correct answer (3) is given
R0	Fail	Incorrect answer (1 or 2) is given
Q	3	Question: What is the estimated volume of blood loss?
A		Possible answers: 1. 0.5-1 L 2. 1-1.5 L 3. 1.5-2 L 4. 2-2.5 L 5. 2.5-3 L 6. 3-3.5 L 7. 3.5-4 L
R2	Very good	Full answer given (point 5 is given)
R1	Good/Satisfactory	Incomplete answer given (“Good” grade –point 4 is given “Satisfactory” grade – points 3 or 6 are given)
R0	Fail	Incorrect answer (1, 2, 7) is given
Q	4	Question: What treatment measures should be implemented in this case?
A		Possible answers: 1. Start anti-shock therapy that consists of the infusion of anti-shock blood substitutes, vasopressors if necessary. After the patient has been stabilized, perform primary surgical debridement of the wounds, alignment and fixation of bone fragments using skeletal traction. Start emergency tetanus preventive measures. 2. Start anti-shock therapy that consists of adequate anesthesia, infusion therapy with crystalloid solutions and blood products. After the patient has been stabilized, perform primary surgical debridement of the wounds, alignment and fixation of bone fragments using skeletal traction. Start emergency tetanus preventive measures. 3. Start anti-shock therapy that consists of adequate anesthesia. After the patient has been stabilized, perform primary surgical debridement of the wounds, alignment and fixation of bone fragments using skeletal traction. Start emergency tetanus preventive measures. 4. Start anti-shock therapy that consists of adequate anesthesia, infusion of anti-shock blood substitutes, and vasopressors if necessary. After the patient has been stabilized, perform primary surgical debridement of the wounds, alignment and fixation of bone fragments using skeletal traction.

		5. Start anti-shock therapy that consists of adequate anesthesia, infusion of anti-shock blood substitutes, and vasopressors if necessary. Start emergency tetanus preventive measures.
R2	Very good	Full answer given (point 2 is given)
R1	Good/Satisfactory	Incomplete answer given ("Good" grade –point 4 is given "Satisfactory" grade – no criteria)
R0	Fail	Incorrect answer (1, 3, 4, 5) is given
Q	5	Question: What should be used for infusion therapy in this case?
A		Possible answers: 1. Blood products: packed red blood cells, fresh frozen plasma. 2. Crystalloid solutions: isotonic sterofundin, Ringer's solution 3. HES: Stabisol, infukoll 4. Gelatin solutions: Gelatinol, Gelofusin 5. Infusion therapy is not indicated.
R2	Very good	Full answer given (points 1 and 2 are given)
R1	Good/Satisfactory	Incomplete answer given ("Good" grade –points 1, 3, 4 are given "Satisfactory" grade – points 3, 4 are given)
R0	Fail	Incorrect answer (5) is given

Case Study No.4

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.01	General Medicine for international students (in English)
C	UC-8	Is able to create and maintain safe living conditions and workplace while preserving the natural environment and ensuring sustainable societal development, including under the danger and occurrence of emergencies or military conflicts
C	PC-1	Ability and readiness to provide emergency medical care in conditions requiring urgent medical intervention
C	PC-6	Ability and readiness to select a type of patient routing based on current medical care procedures
F	A/01.7	Providing emergency and urgent medical care to the population
I		**READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS** An ambulance was called by a police patrol squad. You arrive at the scene and find a man lying on his back with a knife sticking out of his chest in the left 6th intercostal space on the anterior axillary line. The victim is in altered level of consciousness and contact is almost impossible. The pupils are contracted. The heart rate is 120 beats per minute, detected only above large arteries. Blood pressure is 70 and 40 mm Hg, breathing on the left is sharply weakened.
Q	1	Question: What is your preliminary diagnosis?
Q	2	Question: What should be done with the knife sticking out of the wound?
Q	3	Question: What kind of medical aid will you provide to the victim?

Q	4	Question: List possible complications.
Q	5	Question: What are your actions in case cardiac arrest occurs in this case?

Case Study No.4 Checklist

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.01	General Medicine for international students (in English)
C	UC-8	Is able to create and maintain safe living conditions and workplace while preserving the natural environment and ensuring sustainable societal development, including under the danger and occurrence of emergencies or military conflicts
C	PC-1	Ability and readiness to provide emergency medical care in conditions requiring urgent medical intervention
C	PC-6	Ability and readiness to select a type of patient routing based on current medical care procedures
F	A/01.7	Providing emergency and urgent medical care to the population
I		**READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS** An ambulance was called by a police patrol squad. You arrive at the scene and find a man lying on his back with a knife sticking out of his chest in the left 6th intercostal space on the anterior axillary line. The victim is in altered level of consciousness and contact is almost impossible. The pupils are contracted. The heart rate is 120 beats per minute, detected only above large arteries. Blood pressure is 70 and 40 mm Hg, breathing on the left is sharply weakened.
Q	1	Question: What is your preliminary diagnosis?
A		Possible answers: 1. Penetrating stab wound of the chest cavity on the left 2. Non-penetrating stab wound of the chest cavity on the left. Respiratory failure, stage III-IV 3. Stab wound on the left 4. Penetrating stab wound of the chest cavity on the left, possible injury of the lung and/or the heart. Hemorrhagic shock, stage III-IV. Respiratory failure, stage III-IV
R2	Very good	Full answer given (point 4 is given)
R1	Good/Satisfactory	Incomplete answer given (“Good” grade – no criteria “Satisfactory” grade – point 1 is given)
R0	Fail	Incorrect answer (2, 3) is given
Q	2	Question: What should be done with the knife sticking out of the wound?
A		Possible answers: 1. Pull out the knife, apply a dressing, and give the knife to the police. 2. Do not pull out the knife, transport the victim as is. 3. Remove the knife, apply a dressing, puncture 2-3 intercostal space along the midclavicular line and install a drainage tube. Keep the knife for the patient.

		4. Apply the dressing directly to the knife, disinfecting it beforehand.
R2	Very good	Correct answer (2) is given
R0	Fail	Incorrect answer (1, 3, 4) is given
Q	3	Question: What kind of medical aid will you provide to the victim?
A		Possible answers: 1. Psychological support 2. Urgent hospitalization 3.Analgesia 4.Oxygen therapy 5. Establish venous access and initiate infusion of a crystalloid solution 6. Patient monitoring including ECG
R2	Very good	Full answer given (points 2,3,4,5,6 are given)
R1	Good/Satisfactory	Incomplete answer given ("Good" grade –points 2,3,4,5 are given "Satisfactory" grade – points 2,3,4 are given)
R0	Fail	Incorrect answer (1) is given
Q	4	Question: List possible complications.
A		Possible answers: 1. Pneumothorax 2. Hemothorax 3. Cardiac tamponade 4. Clinical death
R2	Very good	Full answer given (points 1,2,3,4 are given)
R1	Good/Satisfactory	Incomplete answer given ("Good" grade –points 1,2,4 are given "Satisfactory" grade – points 1,4 are given)
R0	Fail	No answer is given
Q	5	Question: What are your actions in case cardiac arrest occurs in this case?
A		Possible answers: 1. CPR according to the C-A-B-D algorithm 2. Drainage of the pleural cavity. 3. CPR according to the A-B-C-D algorithm 4. Drainage of cardiac tamponade 5. Infusion therapy 6. CPR according to the C-D-A-B algorithm
R2	Very good	Full answer given (points 1,2,4,5 are given)
R1	Good/Satisfactory	Incomplete answer given ("Good" grade –points 1,2,5 are given "Satisfactory" grade – points 1,5 are given)
R0	Fail	Incorrect answer (3,6) is given

Case Study No.5

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.01	General Medicine for international students (in English)
C	UC-8	Is able to create and maintain safe living conditions and

		workplace while preserving the natural environment and ensuring sustainable societal development, including under the danger and occurrence of emergencies or military conflicts
C	PC-1	Ability and readiness to provide emergency medical care in conditions requiring urgent medical intervention
C	PC-6	Ability and readiness to select a type of patient routing based on current medical care procedures
F	A/01.7	Providing emergency and urgent medical care to the population
I		**READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS** A worker's foot was crushed by a fallen motor. After 1.5 hours, he was freed. The victim told paramedics that he felt overall well and there was only a slight pain in the crushed area, he wanted to continue working. Physical examination results: skin is pale, heart rate is 100 per min, BP is 110/70 mm Hg; on local examination of the injury there is a slight indurative edema of the injured leg, pallor of the skin, some indurative swelling of the skin at the border of healthy and affected areas. The bone is intact.
Q	1	Question: What is your preliminary diagnosis?
Q	2	Question: What should the actions of a paramedic be in this case?
Q	3	Question: What conditions must be considered for a differential diagnosis?
Q	4	Question: What is the possible extend of analgesia required?
Q	5	Question: What are the rules of applying a splint during transport immobilization?

Case Study No.5 Checklist

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.01	General Medicine for international students (in English)
C	UC-8	Is able to create and maintain safe living conditions and workplace while preserving the natural environment and ensuring sustainable societal development, including under the danger and occurrence of emergencies or military conflicts
C	PC-1	Ability and readiness to provide emergency medical care in conditions requiring urgent medical intervention
C	PC-6	Ability and readiness to select a type of patient routing based on current medical care procedures
F	A/01.7	Providing emergency and urgent medical care to the population
I		**READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS** A worker's foot was crushed by a fallen motor. After 1.5 hours, he was freed. The victim told paramedics that he felt overall well and there was only a slight pain in the crushed area, he wanted to continue working. Physical examination results: skin is pale, heart rate is 100 per min, BP is 110/70 mm Hg; on local examination of the injury there is a slight indurative edema of

		the injured leg, pallor of the skin, some indurative swelling of the skin at the border of healthy and affected areas. The bone is intact.
Q	1	Question: What is your preliminary diagnosis?
A		Possible answers: 1. Contusion of the left foot. 2. Fracture of the left foot. 3. Mild crush syndrome of the left foot. 4. Rupture of the ligaments of the left foot.
R2	Very good	Full answer given (point 3 is given)
R1	Good/Satisfactory	Incomplete answer given ("Good" grade –point 1 is given "Satisfactory" grade – point 4 is given)
R0	Fail	Incorrect answer (2) is given
Q	2	Question: What should the actions of a paramedic be in this case?
A		Possible answers: 1. Analgesia 2. Recommend therapeutic and protective regimen, observation by a traumatologist at the place of residence. 3. Apply a tourniquet and elastic bandaging with subsequent removal of the tourniquet and cooling of the limb. 4. Begin transport immobilization and hospitalize the victim. 5. Establish venous access and begin infusion therapy.
R2	Very good	Full answer given (points 1,3,4,5 are given)
R1	Good/Satisfactory	Incomplete answer given ("Good" grade –points 1,3,4 are given "Satisfactory" grade – points 1,4 are given)
R0	Fail	Incorrect answer (2) is given
Q	3	Question: What conditions must be considered for a differential diagnosis?
A		Possible answers: 1. Contusion 2. Fracture 3. Ligament rupture 4. Hematoma 5. Vascular thrombosis 6. Soft tissue damage (rupture).
R2	Very good	Full answer given (points 1,2,3,4,5,6 are given)
R1	Good/Satisfactory	Incomplete answer given ("Good" grade –points 1,2,3,6 are given "Satisfactory" grade – points 1,2,3are given)
R0	Fail	Incorrect answer (6) is given
Q	4	Question: What is the possible extend of analgesia required?
A		Possible answers: 1. Opioid analgesics 2. NSAIDs 3. Paracetamol (acetaminophen) 4. Regional analgesia 5. Adjuvant therapy
R2	Very good	Full answer given (point 2 is given)

R1	Good/Satisfactory	Incomplete answer given (“Good” grade –point 3 is given “Satisfactory” grade – point 1 is given)
R0	Fail	Incorrect answer (4, 5) is given
Q	5	Question: What are the rules of applying a splint during transport immobilization?
A		Possible answers: 1. On one side of the limb. 2. On two sides of the limb 3. On three sides of the limb 4. Immobilization of two nearby joints 5. Immobilization of one adjacent joint. 6. Place padding at the points of contact between the splint and the bone 7. Fix the splint along the entire length
R2	Very good	Full answer given (points 3,4,6,7 are given)
R1	Good/Satisfactory	Incomplete answer given (“Good” grade –points 3,4,7 are given “Satisfactory” grade – points 3,4 are given)
R0	Fail	Incorrect answer (1,2,5) is given

Case Study No.6

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.01	General Medicine for international students (in English)
C	UC-8	Is able to create and maintain safe living conditions and workplace while preserving the natural environment and ensuring sustainable societal development, including under the danger and occurrence of emergencies or military conflicts
C	PC-1	Ability and readiness to provide emergency medical care in conditions requiring urgent medical intervention
C	PC-6	Ability and readiness to select a type of patient routing based on current medical care procedures
F	A/01.7	Providing emergency and urgent medical care to the population
I		**READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS** You are a doctor of an ambulance team. A woman went to visit her relative at the latter's summer house. After drinking one glass of wine both she and her relative went to bathe in a homemade sauna. The relative of the woman did not drink alcohol. After a while she left the sauna citing a headache and noted redness of her skin. About half an hour later, she found the woman unconscious on the floor of the sauna. There was no fire in the stove/boiler, the chimney lid remained closed. The victim's face is bright red. There are traces of vomit around the head and the mouth. The woman has trouble breathing; wheezing can be heard with naked ear, tachycardia up to 110 per minute is noted. BP 80/40.
Q	1	Question: What is the most likely diagnosis?
Q	2	Question: What emergency medical aid should be provided?

Q	3	Question: What conditions must be considered for a differential diagnosis?
Q	4	Question: What are the possible complications?
Q	5	Question: What is the specific antidote therapy in this case?

Case Study No.6 Checklist

	Code	**Competence description / name of labor function / name of work activity / text**
S	31.05.01	General Medicine for international students (in English)
C	UC-8	Is able to create and maintain safe living conditions and workplace while preserving the natural environment and ensuring sustainable societal development, including under the danger and occurrence of emergencies or military conflicts
C	PC-1	Ability and readiness to provide emergency medical care in conditions requiring urgent medical intervention
C	PC-6	Ability and readiness to select a type of patient routing based on current medical care procedures
F	A/01.7	Providing emergency and urgent medical care to the population
I		**READ THE PROVIDED CASE DESCRIPTION AND GIVE DETAILED ANSWERS TO THE QUESTIONS** You are a doctor of an ambulance team. A woman went to visit her relative at the latter's summer house. After drinking one glass of wine both she and her relative went to bathe in a homemade sauna. The relative of the woman did not drink alcohol. After a while she left the sauna citing a headache and noted redness of her skin. About half an hour later, she found the woman unconscious on the floor of the sauna. There was no fire in the stove/boiler, the chimney lid remained closed. The victim's face is bright red. There are traces of vomit around the head and the mouth. The woman has trouble breathing; wheezing can be heard with naked ear, tachycardia up to 110 per minute is noted. BP 80/40.
Q	1	Question: What is the most likely diagnosis?
A		Possible answers: 1. Organophosphorus compounds poisoning 2. Aniline dyes poisoning 3. Carbon monoxide poisoning 4. Heat stroke
R2	Very good	Correct answer (3) is given
R0	Fail	Incorrect answer (1, 2, 4) is given
Q	2	Question: What emergency medical aid should be provided?
A		Possible answers: 1. Clean the oral cavity and pharynx of vomit and mucus 2. Administer Promedol (trimeperidine) intramuscularly; 3. Provide oxygen: 100% oxygen in the first minutes, then 40-60%; 4. Begin artificial ventilation 5. Establish intravenous access 6. Administer glucocorticoids, euphylline, furosemide intravenously

R2	Very good	Full answer given (points 1,3,4,5, 6 are given)
R1	Good/Satisfactory	Incomplete answer given (“Good” grade –points 1,3,4,5 are given “Satisfactory” grade – no criteria)
R0	Fail	Incorrect answer (2) is given
Q	3	Question: What conditions must be considered for a differential diagnosis?
A		Possible answers: 1. Traumatic brain injury 2. Cerebrovascular accident 3. Ketoacidotic coma 4. Acute alcohol intoxication
R2	Very good	Full answer given (points 1,2,4 are given)
R1	Good/Satisfactory	Incomplete answer given (“Good” grade –points 1, 2 are given “Satisfactory” grade – point 4 is given)
R0	Fail	Incorrect answer (3) is given
Q	4	Question: What are the possible complications?
A		Possible answers: 1. Circulatory arrest 2. Acute myocardial ischemia 3. Pulmonary edema 4. Acute gastrointestinal bleeding
R2	Very good	Full answer given (points 1,2,3 are given)
R1	Good/Satisfactory	Incomplete answer given (“Good” grade –points 1 and 2 / 2 and 3 / 1 and 3 are given “Satisfactory” grade – point 1, 2,or 3 is given)
R0	Fail	Incorrect answer (4) is given
Q	5	Question: What is the specific antidote therapy in this case?
A		Possible answers: 1. Atropine 2. Acyzol 3. Adrenaline 4. Naloxone
R2	Very good	Correct answer (2) is given
R0	Fail	Incorrect answer (1, 3, 4) is given

4. Assessment criteria for learning outcomes

"Pass" is given to a student who has shown a sufficiently strong knowledge of the basic concepts of the subject; is able to complete specific practical tasks outlined in the program with no outside help, use recommended reference material, and correctly evaluate the results.

"Fail" is given to a student who has significant gaps in knowledge of the basic concepts of the subject, is not able reach the correct solution to a specific practical task outlined in the curriculum even with outside help.

Appendix 1

Practical Skills Assessment Checklist

Practical Skill Name "Crush syndrome first aid"

C	PC-1	Ability and readiness to provide emergency medical care in conditions requiring urgent medical intervention	
F	A/01.7	Providing emergency and urgent medical care to the population	
WA	Work activities as part of the function: Identifying life-threatening conditions, including clinical death (cessation of vital functions, i.e. blood circulation and/or respiration), that require urgent medical aid. Providing urgent medical aid to patients experiencing Identifying life-threatening conditions, including clinical death (cessation of vital functions, i.e. blood circulation and/or respiration).		
	Action	Performed	Not Performed
1.	Ensure safety (in case there is a possibility of collapse of the building, trench, etc.), and then begin providing medical aid	2 points	-2 points
2.	Loudly ask the victim “Do you need help? How long have you been trapped for?”	1 point	-1 point
3.	Seek help from someone nearby by saying "Help me free this person from under the debris!"	1 point	-1 point
4.	Put a facemask on the victim to prevent inhalation of dust and to begin oxygen therapy (if there is no risk of fire)	1 point	-1 point
5.	Verbally assess the intensity of pain (severe, moderate, mild) and the ability to move the crushed limb	1 point	-1 point
6.	Measure blood pressure, pulse, respiration rate	1 point	-1 point
7.	Establish venous access and initiate intravenous saline administration	1 point	-1 point
8.	Administer painkillers intramuscularly/intravenously	1 point	-1 point
9.	If technically possible, apply a hemostatic tourniquet at the root of the crushed limb	2 points	-2 points
10.	Free the limb from compression	2 points	-2 points
11.	Bandage the entire limb with an elastic bandage from the applied tourniquet to the fingertips (collapsing the lymphatic vessels and superficial veins, through which a significant amount of the total toxins pass into the rest of the body)	2 points	-2 points
12.	Remove the hemostatic tourniquet. Hemostatic tourniquet should be kept on only in case of arterial bleeding or if the limb is non-viable (ischemic muscle contracture)	2 points	-2 points
13.	Immobilize the limb with ladder or pneumatic splints	1 point	-1 point
14.	Cool the limb (cover the limb with ice)	1 point	-1 point
15.	Carefully transport the victim on a stretcher in supine (lying) position	1 point	-1 point
	Total	20 points	

Final grade: "Pass" (14 or more points) / "Fail"

Assessment criteria:

"Pass" - at least 75% of required actions performed

"Fail" - 74% of required actions or less performed