AMERICAN CHAMBER OF COMMERCE IN KAZAKHSTAN

AMCHAM ISSUE BRIEF

Modernizing Emergency Medical Services training and first aid standards

BRIEF DESCRIPTION OF THE ISSUE:

Currently, the standards for Emergency Medical Service (EMS) and first aid trainings in Kazakhstan are not fully aligned with international best practices. This misalignment allows for training organizations, both state and private, to provide certificates to a large body of listeners at one time thereby depriving the listeners of practical hands-on skills. The best international practices emphasize the need for advanced concise training, standardized programs with recognized certification, and biyearly education to ensure the preparedness of EMS and First Responders to react effectively.

In line with international best practices, we propose that existing orders be updated to incorporate higher uniformed standards, additional EMS programs, improved qualification requirements for trainers, and focused curricula for First Responders and first aiders. This will ensure that Kazakhstan's emergency medical response system is more effective, modern, and aligned with global standards thereby reducing morbidity and mortality rates here.

POTENTIAL IMPACT:

Improving medical training standards will have several implications, including:

- **Better Prepared First Responders**: Well-trained first responders are more capable of saving lives and ensuring the health and safety of individuals during emergencies.
- **Beneficiaries of the Reform**: Several types of institutions and professionals will benefit from these improved standards, including:
    - Private and state training centers offering additional and informal medical education.
    - Healthcare organizations employing medical personnel trained under these updated programs.
    - Law enforcement agencies, emergency response services, and military personnel requiring advanced resuscitation training.
    - Industries with mandatory first aid training requirements, such as transportation, education, and hazardous production sectors.
- **International Participation**: By aligning with international standards, Kazakhstan’s workforce will be better positioned to participate in global value chains, demonstrating competence and compliance with international norms.

However, the reform will require additional compliance costs for training centers due to the implementation of new qualification requirements and training aids. There may also be a

need for restructuring among organizations previously providing non-standardized or unregulated courses. Furthermore, the requirement for an effective designated oversight body may introduce new administrative obligations for training providers.

PROPOSED LEGISLATIVE CHANGES

Current edition of the law	Proposed version by AmCham	Justifications
Order of the Vice Minister of Health of the Republic of Kazakhstan dated February 25, 2021, No. 105 *On the Approval of the Rules for Training in Emergency Medical Care Skills in Accordance with International Standards*		
Chapter 1. General Provisions Clause 3 13) Certified Trainer – a specialist **with higher medical education** who has completed a trainer preparation program, obtained a certification, and is accredited to train instructors. 14) Training instructor – a specialist **with higher medical education** who has completed a specialized instructor training program, obtained an internationally recognized instructor certificate, and is authorized to train medical personnel in emergency medical care skills in accordance with international standards.	**Chapter 1. General Provisions** Clause 3 13) Certified Trainer – a specialist **with secondary medical education or higher** who has completed a trainer preparation program, obtained a certification, and is accredited to train instructors. 14) Training instructor – a specialist **with secondary medical education or higher** who has completed a specialized instructor training program, obtained an internationally recognized instructor certificate, and is authorized to train medical personnel in emergency medical care skills in accordance with international standards.	Many skilled and experienced medical professionals in Kazakhstan possess secondary medical education and substantial practical experience. By broadening the qualifications to include both higher and secondary medical education, more qualified individuals can contribute to training, especially in regions where access to higher education might be limited. This will increase the pool of potential instructors and enhance the reach and effectiveness of emergency medical care training across the country.

Chapter 2. Procedure for Training in Emergency Medical Care Skills in Accordance with International Standards 20. Qualification requirements for instructors and trainers: **- Higher medical education;** - At least 5 years of practical experience in medical practice, with proficiency in Kazakh and Russian languages (English language proficiency at the Intermediate level is preferred); - Experience in emergency medical training (preferred); - Skills in effective teaching, public speaking, group discussions, working with clinical scenarios, and conducting continuous and final assessments of trainees.	**Chapter 2. Procedure for Training in Emergency Medical Care Skills in Accordance with International Standards** 20. Qualification requirements for instructors and trainers: **Secondary medical education or higher;** - At least 5 years of practical experience in medical practice, with proficiency in Kazakh and Russian languages (English language proficiency at the Intermediate level is preferred); - Experience in emergency medical training (preferred); - Skills in effective teaching, public speaking, group discussions, working with clinical scenarios, and conducting continuous and final assessments of trainees.	This approach aligns with the global practice of recognizing diverse pathways to becoming qualified trainers and ensures that those with hands-on experience are not excluded from training roles.
Chapter 1. General Provisions 7. The simulation lab is equipped with educational materials, tools for practical training in the discipline, and a minimum set of medical devices and simulation equipment in accordance with Appendix 2 of these Rules.	**Chapter 1. General Provisions** 7. The simulation center is equipped with educational materials, tools for practical training in the discipline, and a minimum set of medical devices and simulation equipment in accordance with Appendix 2 of these Rules. 1) The simulation center must conduct courses in accordance with internationally recognized educational programs in the field of medicine and healthcare. Advanced courses of ACLS, PALS, ASLS, PHTLS, NRP, Flight	In order for Order No. 105 to fully reflect international standards in simulation-based medical education, it is necessary to strengthen the requirements for simulation training centers. Mandating the use of internationally recognized programs and the involvement of certified instructors will ensure the consistency, quality, and global relevance of training. These additions will enhance the credibility of the regulation itself, align Kazakhstan's simulation-based training practices with global best practices, and support the strategic goal of

	Medicine, ATLS, ASLS and ABLS must be conducted in the Simulation Center. 2) The Simulation Center must employ at least two instructors holding valid international instructor certifications, confirming their eligibility to teach the respective programs.	improving healthcare outcomes through modern, evidence-based education.
Chapter 2. Procedure for Training in Emergency Medical Care Skills in Accordance with International Standards 16. Training is conducted in groups of 6 to 12 participants.	**Chapter 2. Procedure for Training in Emergency Medical Care Skills in Accordance with International Standards** 16. Training is conducted in groups with a maximum instructor-to-student ratio of 1:6, in accordance with international standards.	To align with established international standards in emergency medical training, it is essential to specify not only group size but also the instructor-to-student ratio. A maximum ratio of 1:6 ensures that each participant receives adequate attention, hands-on practice, and personalized feedback, all of which are critical for mastering life-saving skills. This amendment improves the quality of training and increases the effectiveness of knowledge and skills retention, ultimately contributing to safer and more competent healthcare delivery.
Chapter 1. General Provisions 4. The following standards are recognized as international standards for emergency medical care: 1) Basic Life Support (BLS). 2) Advanced Cardiac Life Support (ACLS). 3) Pediatric Advanced Life Support (PALS). 4) Prehospital Trauma Life Support (PHTLS). 5) Neonatal Resuscitation Program (NRP).	**Appendix 3** To the Rules for Training in Emergency Medical Care Skills in Accordance with International Standards **1. Basic Life Support (BLS)** The BLS course duration is 4 hours and must include the following mandatory topics: • 1-Rescuer Adult BLS: Chains of survival, scene safety and assessment, adult compressions, pocket mask, 1-rescuer adult BLS.	To supplement Order No. 105, it is proposed to introduce Appendix 3, which outlines the course duration and content for each of the internationally recognized emergency medical care programs listed in Chapter 1, Clause 4. This appendix will define standardized course structures and minimum training hours for programs such as BLS, ACLS, PALS, PHTLS, NRP, Flight Medicine, ASLS,ATLS and ABLS. Introducing standardized course hours and curricula for internationally recognized emergency care programs ensures uniformity and consistency in training across all simulation and

6) Safe Ambulance Driving Techniques Trainings 7) Training Program on Flight Physiology and Patient Transport. 8) Advanced Stroke Life Support (ASLS). 9) Advanced Trauma Life Support (ATLS). 10) Advanced Burn Life Support (ABLS).	• AED and Bag-Mask Device usage. • 2-Rescuer Adult BLS. • Special Considerations: Mouth-to-mouth breaths, rescue breathing, breaths with an advanced airway, opioid-associated life-threatening emergency, maternal cardiac arrest. • High-Performance Teams: Team dynamics, high-performance teams. • Child BLS: Chains of survival, child BLS, 2-rescuer child CPR. • Infant BLS: Compressions, Bag-Mask device for infants, 2-rescuer infant CPR, AED. • Relief of Choking. • Final Exam. **2. Advanced Cardiac Life Support (ACLS)** The ACLS course duration is 16 hours and must include the following mandatory topics: • High-Quality BLS Practice: Performing prompt, high-quality BLS, prioritizing early chest compressions, and integrating early AED use. • Airway Management.	education centers. It aligns the national training framework with global benchmarks and allows for effective monitoring, evaluation, and accreditation of these programs. This amendment enhances the transparency and quality of education, guaranteeing that all participants receive comprehensive and standardized instruction based on the latest international evidence-based practices.

	• Technology Review: Monitor/defibrillator functions, buttons, and connections; crash cart/jump kit supply locations; the use of feedback devices. • Preventing Arrest – Bradycardia: Recognizing bradycardias and early management of bradycardias. • Preventing Arrest – Tachycardia: Management of stable and unstable tachycardia. • High-Performance Teams: Communication and its impact on team performance. • High-Performance Teams – Cardiac Arrest and Post-Cardiac Arrest Care. • High-Performance Teams – Case Scenario Practice. • Final Exam. **3. Pediatric Advanced Life Support (PALS)** The PALS course duration is 16 hours and must include the following mandatory topics: • CPR Coach and High-Performance Teams. • Child High-Quality BLS. • Infant High-Quality BLS.	

	• Child and Infant Choking Management. • Initial and Primary Assessment. • Respiratory Emergencies. • Shock Emergencies. • Airway Management. • Vascular Access. • Rhythm Disturbances and Electrical Therapy. • Case Scenario Practice. • Final Exam. **4. Prehospital Trauma Life Support (PHTLS)** The PHTLS course duration is 16 hours and must include the following mandatory topics: • Trauma Assessment and Exsanguinating Hemorrhage. • Airway Management. • Breathing, Oxygenation, and Ventilation. • Circulation Management. • Disability – Traumatic Brain Injury. • Disability – Spinal Injury.	

	• Expose/Environment Considerations. • Pain Management and Additional Injuries. • Final Exam. **5. Neonatal Resuscitation Program (NRP)** The NRP course duration is 16 hours and must include the following mandatory topics: • Foundations of Neonatal Resuscitation. • Anticipating and Preparing for Resuscitation. • Initial Steps of Newborn Care. • Positive Pressure Ventilation (includes Laryngeal Mask). • Endotracheal Intubation. • Chest Compressions. • Medications in Neonatal Resuscitation. • Resuscitation and Stabilization of Babies Born Preterm. • Post-Resuscitation Care. • Special Considerations. • Ethics and Care at End of Life. **6. Safe Ambulance Driving Techniques Trainings**	

	The course duration is16 hours and must include the following mandatory topics: • Making Safety a Priority. • EMS Vehicle Operation and the Law. • Maneuvering Your Vehicle. • Vehicle Inspection and Maintenance. • Mental, Emotional, and Physical Preparedness. • Emergency Response. • Crash Prevention. • Driving Skills Course (Overview). • Technological Aids. • Simulation Training. • Orientation to the Driving Range. • Skill Station: 45-Meter Alley. • Skill Station: Lane Change. • Skill Station: Serpentine. • Skill Station: Backing (Straight, Left, and Right). **7) Flight Physiology and Patient Transport**. The Flight Medicine program is 24 hours in duration that teaches advanced knowledge and skill in the field of flight	

	and critical care transport medicine and must include the following mandatory topics; • Safety/transport fundamentals and post-incident survival. • Flight physiology • Advanced airway and ventilation management • Trauma and burn emergencies • Neurological emergencies • Cardiopulmonary emergencies • Toxic and environmental exposures • Perinatal and pediatric emergencies • General medical emergencies.. • Final Exam. **8) Advanced Stroke Life Support (ASLS)** The ASLS course duration is 16 hours and must include the following mandatory topics: • Highlights the principles of prehospital stroke management that make up the cur-rent standard of care, such as determining when to call • a stroke alert and quickly transport the patient to the nearest appropriate facility	

	• Explains how to communicate the patient's symptoms, time of onset, and neuro-logic exam clearly and succinctly with hospital personnel • Discusses the etiologic evaluation and secondary stroke prevention for stroke patients • Describes the management of goals for acute ischemic stroke, intracerebral hemorrhage, and subarachnoid hemorrhage • Outlines post-acute care management including supportive medical care, rehabilitation, and discharge planning for stroke patients **9) Advanced Trauma Life Support (ATLS)** The ATLS course duration is 16 hours and must include the following mandatory topics: • Assess the patient's condition rapidly and accurately; • Resuscitate and stabilize the patient according to priority; • Determine if the patient's needs exceed a facility's capacity; • Arrange appropriately for the patient's inter-hospital transfer (who, what, when, and how);	

	• Assure that optimum care is provided and that the level of care does not deteriorate at any point during the evaluation, resuscitation, or transfer process. **10) Advanced Burn Life Support (ABLS)** The ABLS course duration is 8 hours and must include the following mandatory topics: • Initial Assessment and Management • Airway Management • Smoke Inhalation Injury • Shock and Fluid Resuscitation • Burn Wound Management • Electrical Injury • Chemical Burns • Pediatric Burn Injuries • Stabilization Transfer and Transport • Disaster Management	
Order of the Minister of Health of the Republic of Kazakhstan dated December 15, 2020, No. KR DSM-269/2020		

Registered with the Ministry of Justice of the Republic of Kazakhstan on December 20, 2020, No. 21814 *On the Approval of the Rules for the Provision of First Aid by Individuals Without Medical Education, Including Those Who Have Undergone Relevant Training, and the First Aid Standard*		
Chapter 2. Procedure for Providing First Aid by Individuals Without Medical Education, Including Those Who Have Undergone Relevant Training 8. The category of individuals without medical education required to undergo mandatory first aid training: 1) Employees of internal affairs bodies engaged in operational and other activities involving interaction with the public; 2) Military personnel of the Armed Forces of the Republic of Kazakhstan, national or state security agencies, and the National Guard troops; 3) Fire service personnel; 4) Rescuers of emergency rescue services; 5) Crew members of air, water, and railway transport; 6) Drivers of all types of public transport vehicles; 7) Employees of departmental and private security organizations;	**Chapter 2. Procedure for Providing First Aid by Individuals Without Medical Education, Including Those Who Have Undergone Relevant Training** 8.1 Training for police officers, emergency services personnel, and other rescue workers must include • Trauma Care • Scene Management and Patient Assessment • Airway, Breathing, and Oxygenation • Hemorrhage, Circulation, and Shock • Disability: Traumatic Brain Injury and Spinal Trauma	This differentiated approach will ensure that individuals with high-risk or critical response roles receive more targeted and effective training. By customizing the training based on the specific demands of the profession, we can ensure that each group is adequately prepared for the unique challenges they face in emergency situations. The inclusion of advanced training for police officers, emergency personnel, and rescuers will provide them with the necessary skills for handling more complex medical emergencies, thus improving their ability to act swiftly and efficiently under pressure. Moreover, specialized training programs for different groups will foster better teamwork, improve their tactical response, and enhance their capacity to manage stress and make critical decisions in high-pressure environments. This will ultimately lead to improved safety and outcomes for both the professionals providing aid and the individuals in need of assistance. Additionally, these tailored training programs will be in line with international best practices, ensuring the highest

8) Employees of educational institutions (teachers of all types of educational institutions, staff of preschool and educational institutions); 9) Employees of hazardous industrial facilities; 10)Employees of healthcare organizations who do not have a medical education.		standards of care and readiness for all individuals involved in emergency response.
Order of the Minister of Defense of the Republic of Kazakhstan dated September 5, 2019, No. 699 **Registered with the Ministry of Justice of the Republic of Kazakhstan on September 12, 2019, No. 19372** On the Approval of the Rules for Medical Support of State Aviation Flights of the Republic of Kazakhstan		
Chapter 1. General Provisions 2-2. Flight medical support is provided by the military medical service or the medical unit of a military unit or state aviation institution of the Republic of Kazakhstan (hereinafter referred to as the aviation unit medical service).	2-2. Flight medical support is provided by the military medical service or the medical unit of a military unit or state aviation institution of the Republic of Kazakhstan (hereinafter referred to as the aviation unit medical service). The aviation unit medical service must undergo training in aviation medicine. The student must hold a valid International certificate in ACLS, PALS, PHTLS, and NRP before taking the course. Each student must be licensed by an Internationally recognized body.	International standards in aviation medicine ensure that medical personnel are adequately trained to handle the unique challenges of providing care in flight conditions. Current training frameworks lack standardized protocols, which can lead to inconsistent medical care and compromised patient outcomes. By requiring aviation medical services to undergo training based on international standards, we ensure that personnel are prepared to respond effectively to medical emergencies in the air, using the most current and reliable practices recognized worldwide.