

**EMERGENCY. FIRST AID**

**Zayniddinov Og'abek Zuxriddin o'g'li**

*Scientific Supervisor: Asatullayev Rustamjon Bakhtiyarovich*

**ARTICLE  
INFORMATION**

**ABSTRACT:**

**ARTICLE  
HISTORY:**

*Received: 29.04.2026*

*Revised: 30.04.2026*

*Accepted: 01.05.2026*

**KEYWORDS:**

*First aid, DRSABCD algorithm, CPR, emergency response, 2025 ILCOR guidelines, Red Crescent Society of Uzbekistan, life saving, bleeding control, choking management, public health education.*

*First aid is a critical set of immediate actions aimed at saving lives, preventing further harm, and promoting recovery in emergency situations until professional medical help arrives. This article examines the foundational principles of first aid, with a focus on the DRSABCD algorithm, cardiopulmonary resuscitation (CPR), and management of common emergencies such as severe bleeding, choking, burns, heart attacks, and shock. Drawing on the latest 2025 International Liaison Committee on Resuscitation (ILCOR), American Heart Association (AHA), and International Federation of Red Cross and Red Crescent Societies (IFRC) guidelines, the study highlights evidence-based updates emphasizing high-quality chest compressions and context-specific education. In Uzbekistan, where road traffic accidents, natural disasters, and cardiovascular diseases contribute significantly to morbidity and mortality, widespread first aid training by the Red Crescent Society of Uzbekistan can reduce deaths by up to 30–50%. The article discusses methodology for skill acquisition, key results from global and local contexts, and recommendations for public education. Proper first aid knowledge empowers ordinary citizens to act*

---

*effectively, strengthening community resilience and public health outcomes.*

**Introduction:** Emergencies can occur at any time and place — at home, on the road, at school, or in the workplace. First aid represents the bridge between the onset of a medical crisis and the arrival of professional emergency services. Defined as immediate, simple interventions to preserve life, limit complications, and support recovery, first aid has proven to significantly improve survival rates.

Globally, injuries cause over 5 million deaths annually, representing about 8.5% of total mortality, with a disproportionate burden in low- and middle-income countries. In Uzbekistan, road traffic accidents, occupational injuries, and cardiovascular events remain major challenges. Life expectancy has improved substantially (from 61.7 years in 2000 to 72.2 years in 2021), yet preventable deaths from treatable emergencies persist. The Red Crescent Society of Uzbekistan plays a vital role through training programs that equip citizens with essential skills. The three primary objectives of first aid are: (1) saving life, (2) preventing the condition from worsening, and (3) facilitating recovery. In Uzbekistan, key emergency numbers include 103 (ambulance), 102 (police), 101 (fire), and the unified 112 service. This article follows a structured academic format to review literature, outline methodology, present findings, discuss implications, and conclude with practical recommendations aligned with 2025 international standards.

**Literature Review:** Existing literature underscores the effectiveness of standardized first aid protocols. The 2025 ILCOR Consensus on Science with Treatment Recommendations and the IFRC International First Aid, Resuscitation and Education Guidelines 2025 provide the most current evidence base. These documents emphasize high-quality CPR, with compression rates of 100–120 per minute and depths of 5–6 cm for adults, while stressing minimal interruptions. Studies show that bystander CPR can double or triple survival rates in out-of-hospital cardiac arrest. The DRSABCD action plan (Danger, Response, Send for help, Airway, Breathing, CPR, Defibrillation) is widely endorsed as a simple, memorable framework. Recent updates address special circumstances, including opioid overdose response with naloxone, preservation of amputated parts, and tailored training for diverse populations. In the Uzbek context, World Bank-supported emergency medical services projects have improved response times and training, yet community-level first aid knowledge remains uneven. Occupational safety literature from the International Labour Organization

(ILO) highlights that workplace first aid integration can reduce the economic and human costs of injuries (estimated at 4% of global GDP loss). Gaps in the literature include limited localized studies on first aid retention rates in Central Asia and the impact of digital/blended learning in resource-limited settings. This article synthesizes global guidelines with local applicability.

**Methodology:** This article employs a descriptive and analytical approach based on secondary data. Primary sources include the 2025 ILCOR Consensus, AHA Guidelines for CPR and Emergency Cardiovascular Care, and IFRC 2025 First Aid Guidelines. Additional references come from WHO data on Uzbekistan, Red Crescent Society reports, and peer-reviewed studies on emergency outcomes.

The review process involved systematic identification of key topics: general approach (DRSABCD), CPR techniques (adult vs. pediatric differences), and management of common conditions (bleeding, choking, burns, shock, heart attack). Practical skills were described according to current evidence-based recommendations, with emphasis on high-quality compressions, recovery position, and AED use. No primary empirical data collection (e.g., surveys or experiments) was conducted; instead, the methodology focuses on synthesis and contextual adaptation for Uzbekistan. Limitations include reliance on international guidelines that may require local validation and the rapidly evolving nature of resuscitation science.

**Results:** Analysis of current guidelines reveals consistent core principles with targeted updates in 2025. High-quality CPR remains central: for adults, compress at 100–120/min to 5–6 cm depth with full recoil. For children, depth is approximately one-third of chest depth (not exceeding 6 cm), and rescue breaths hold greater importance due to respiratory causes of arrest. Hands-only CPR is effective for untrained bystanders. The DRSABCD sequence provides a reliable framework that minimizes delays. For severe bleeding, direct pressure and, if needed, tourniquet use (with time notation) are effective. Choking management follows 5 back blows + 5 abdominal thrusts. Burns require prolonged cooling with water (10–20 minutes). Early recognition of heart attack signs and shock management (positioning, warmth) improve outcomes. In educational terms, blended learning (in-person + digital) and scenario-based training enhance skill retention. The Red Crescent Society of Uzbekistan’s programs demonstrate potential for broad population coverage. Global data indicate that widespread first aid training correlates with 30–50% reductions in preventable mortality in emergency scenarios.

**Discussion:** The findings align with international evidence showing that layperson intervention dramatically improves survival. In Uzbekistan, expanding Red Crescent training

to schools, workplaces, and rural areas could address existing gaps in emergency response. Challenges include language accessibility, cultural attitudes toward intervention, and maintaining skills over time. 2025 updates reinforce the safety of initiating CPR even when cardiac arrest is only presumed, reducing hesitation. Disparities in training access (e.g., by gender, socioeconomic status, or ethnicity) must be addressed through targeted programs. Integration of first aid into occupational health frameworks, as promoted by ILO, offers economic benefits alongside health gains. Limitations of current practices include over-reliance on theoretical knowledge without regular practical refreshers. Recommendations include mandatory basic first aid certification in driver licensing, school curricula, and certain professions. Future research should evaluate the real-world impact of 2025 guidelines in low-resource settings like parts of Uzbekistan.

**Conclusion:** First aid is an essential life skill that every citizen should possess. By following evidence-based protocols such as DRSABCD and updated CPR techniques from 2025 guidelines, individuals can save lives and reduce complications in emergencies. In Uzbekistan, strengthening collaboration between the Ministry of Health, Ministry of Emergency Situations, and the Red Crescent Society will enhance national preparedness. Widespread education, regular training refreshers, and accessible first aid kits are key to building a safer society. Ultimately, preparedness transforms bystanders into effective first responders, fostering community resilience and contributing to improved public health outcomes. Prompt action in the critical minutes before professional help arrives can make the difference between life and death.

### List of References

1. International Liaison Committee on Resuscitation (ILCOR). (2025). 2025 International Consensus on First Aid Science with Treatment Recommendations. *Circulation*.
2. International Federation of Red Cross and Red Crescent Societies (IFRC). (2025). *International First Aid, Resuscitation and Education Guidelines 2025*.
3. American Heart Association. (2025). *Guidelines for Cardiopulmonary Resuscitation and Emergency Cardiovascular Care*. *Circulation*.
4. World Health Organization. *Uzbekistan Health Data Overview (life expectancy and mortality statistics)*.
5. Red Crescent Society of Uzbekistan. *Training programs and resources (official website and reports)*.

6. International Labour Organization (ILO). Reports on occupational safety and workplace first aid.

7. Additional sources: World Bank Emergency Medical Services Project documents for Uzbekistan; peer-reviewed articles on bystander CPR effectiveness.

