In emergency situations, life or death is often determined within the first few minutes of a crisis. The medical knowledge and expertise of first-responders coupled with a reliable emergency response infrastructure can make a critical difference when an unexpected illness, accident, or widespread disaster occurs.

In Eastern Europe and Central Asia, a lack of well trained first-responders combined with a relatively weak emergency response infrastructure result in death rates from accidents and cardiac incidents that are roughly three times greater than those in the United States, according to WHO studies. As a result, many countries in the region have made improving pre-hospital and hospital-based emergency care a key priority of their health system reform efforts.

In Kazakhstan, a Central Asian nation of 15.2 million inhabitants, the Almaty EMS Training Center has been at the forefront of the nation’s efforts to strengthen emergency response and urgent care capacity. The training center was established in October 1994 by the American International Health Alliance (AIHA) through a USAID-funded partnership linking healthcare institutions from Almaty with counterparts in Tucson, Arizona. Now part of the National Institute for Postgraduate Medical Education, the center serves as the university’s Department of Emergency Care and is supported by the Kazakh Ministry of Health. As a result, its training courses have been expanded and are being offered nationwide.

Over the past 12 years, the Almaty EMS Training Center has provided basic and advanced life support training to nearly 6,000 professionals who respond to emergencies ranging from routine medical cases and traumas to disasters involving mass casualties. Training for healthcare professionals focuses on topics including CPR, emergency obstetrics, intubation, spinal immobilization, disaster response, and triaging practices that can be performed at the accident site, en route to, and in the hospital setting. The center also plays a critical role in upgrading urgent care skills necessary for the management of medical emergencies among primary healthcare personnel, as well as teaching life-saving skills to non-medical professionals such as flight attendants, firefighters, oil industry workers, and traffic police who may be called upon to provide emergency care.

“In Kazakhstan, accidental injuries, heart attacks, strokes, and high-risk deliveries represent the main reasons people require urgent care. In this respect, we are no different than much of the world,” explains EMS Training Center Director Rakhmet Rakhimbaev. “We do have some environmental conditions in and around Almaty that make allergic reactions, acute asthma, poisonous bites, and natural disasters such as earthquakes and mudslides a concern, as well.”

Before this facility was opened, Kazakhstan didn’t have a center that offered advanced urgent care training. Because of our partnership with AIHA and our colleagues from Tucson, though, both clinicians and lay people now have a place where they can learn emergency techniques—from basic first aid to more advanced interventions.”

The courses taught at the center emphasize the acquisition of practical skills and are composed of learning modules accompanied by computer presentations, slides, overheads, and handouts. They also allow plenty of time for hands-on exercises that use mannequins as teaching tools. Training modules are constantly being updated to reflect current trends in emergency care and are adapted to meet the unique needs of individual communities and regions.

“Before this facility was opened, Kazakhstan didn’t have a center that offered advanced urgent care training. Because of our partnership with AIHA and our colleagues from Tucson, though, both clinicians and lay people now have a place where they can learn emergency techniques from basic first aid to more advanced interventions,” says Yuri Silachev, who directed the EMS Training Center from 1999 to 2005. “Our courses are rooted in modern, evidence-based protocols and designed to lay out step-by-step the procedures that should be taken to address a wide range of medical emergencies,” he continues, explaining that the partnership’s work changed the way emergency medicine is practiced in the country.

Stressing the importance of the skills-based training methodology used at the center, Silachev describes how pleased participants are with how much they learn during the courses. “Most of our students are quick to admit that they’ve never had the opportunity to take such courses and they are grateful for the new knowledge and skills they have gained, as well as for the expertise of the instructors, who have all been trained in adult learning techniques,” he says.

Rakhimbaev agrees, noting that students routinely call or write letters of thanks after completing a course. “The urgent care skills acquired at our center are in great demand and most of our trainees employed in the healthcare field don’t have any problems with professional advancement. What we teach is equally important for non-medical professionals—especially those whose work routinely puts them in close contact with dangerous situations,” he points out.

Discussing his plans for future development at the Almaty EMS Training Center, Rakhimbaev concludes, “Training first-responders to save lives should be one of Kazakhstan’s main healthcare priorities because far more people die from accidents and other emergency situations than other causes. As far as urgent care goes, time is one of our worst enemies and we need to be better prepared for battle. That’s what our courses are all about.”

—Rakhmet Rakhimbaev, director of the Almaty EMS Training Center