MISSION REPORT · 28 AUGUST TO 10 SEPTEMBER 2019

Mongolia 2019

Building the foundations

The relationships, field observations, education and systems work that helped shape the development of EMS Global Foundation.

EMS GLOBAL FOUNDATION · OCTOBER 2026



Patient extrication scenario, Nalaikh, 4 September 2019

IN THIS REPORT

From a short course to a system

The 2019 mission moved the program from stand-alone clinical training towards a broader examination of how prehospital care operated as a system: in ambulances, at road crashes, between agencies and at national level.

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~115
people in the three principal training activities (estimated)

3 sites
Ulaanbaatar, Darkhan and Nalaikh

6 Sep
National EMS Symposium, Government House, Ulaanbaatar

EXECUTIVE SUMMARY

A shift from courses to systems

The 2019 Mongolia mission marked a shift from stand-alone clinical training towards a broader examination of how prehospital care operated as a system. Building on engagement begun in 2017 and training undertaken in 2018, the program combined frontline observation, multi-agency exercises, national discussion, clinical education and practical equipment support.

The mission worked with ambulance doctors, emergency physicians, the National Emergency Management Agency, police, rescue personnel and government stakeholders. Activities in Ulaanbaatar, Darkhan and Nalaikh focused on trauma, multi-casualty incidents, road-crash management, command arrangements and cooperation between medical and rescue services. An estimated 115 people took part in the principal training activities.

The central lesson was straightforward.

Mongolia needed an emergency medical system designed for its own geography, resources, workforce and institutions. Training mattered, but sustainable development also required local ownership, inter-agency coordination, stronger prehospital education, better data and the capacity to train future personnel within Mongolia.

MISSION AT A GLANCE

Two weeks, three sites

Date	Activity
28 Aug–10 Sep	Mission period in Mongolia
31 Aug	Six-hour observational shift with a Ulaanbaatar 103 ambulance doctor and driver
2 Sep	Multi-agency training in Darkhan
4 Sep	NEMA, police and 103 ambulance trauma scenarios in Nalaikh
6 Sep	National EMS Symposium at Government House, Ulaanbaatar
7–8 Sep	EMS multi-casualty incident training in Ulaanbaatar
9 Sep	NEMA disaster-management exercise: building collapse, entrapment and multiple casualties

EMS Global Foundation did not exist in its current form in 2019. This report does not recast the mission as an EMS Global Foundation project. It the explains how the principles emerging from it helped establish the groundwork for the international organisation that followed.

CONTEXT · 2017–2019

From training to systems development

The 2019 program followed trauma and multi-casualty education delivered in Selenge Province and Ulaanbaatar during 2018. That earlier work showed a doctor-led ambulance service operating across markedly different environments, with variation in vehicles, equipment, staffing and access to further training.

A 2018 survey of EMS personnel in Selenge Province and Ulaanbaatar (n=50) examined workforce roles, ambulance resources, demand, response times, training needs and experiences of providing emergency care. It identified strong demand for practical prehospital education, including care at scene, treatment during transport, clinical decision-making, handover, multi-casualty triage, trauma care, patient movement and extrication.

2018 EMS SURVEY · N=50

System picture

- Doctor-led ambulance model
- Variable vehicles and equipment
- Broad emergency workload
- Delays and resource constraints

Priorities identified

- Practical care at scene
- Treatment during transport
- Clinical decision-making and handover
- Trauma, triage and extrication

6 SEPTEMBER · THE SURVEY GOES NATIONAL

Asking a different question

These findings were presented at the National EMS Symposium on 6 September 2019. Their importance was not the precision of each historical data point, but the move towards understanding the setting in which education was being delivered.

The mission was beginning to ask what sort of EMS system Mongolia needed, rather than only what visiting instructors could teach.

The international team

- **Dr Hamish McLean**
- **Joe Acker**
- **Chief Darrell Reid**
- **Duncan McConnell**

Working alongside Mongolian health, ambulance and emergency-management partners, the team brought experience in paramedicine, ambulance systems, emergency management, fire and rescue, and disaster coordination.

31 AUGUST · ULAANBAATAR

Understanding EMS from the frontline

On 31 August, team members spent six hours accompanying a Ulaanbaatar 103 ambulance doctor and driver. The calls included sick children, acute illness and cardiac arrest, providing a direct view of how emergency care was delivered across the city.

The shift demonstrated why simple comparisons with overseas ambulance systems were inadequate. Ambulance doctors were providing substantial care in homes, public places and at the roadside, often with constrained resources. Care included inside a ger and an ambulance doctor suturing a head injury at the roadside. These observations reinforced the need to begin with local practice and operational reality.



Care inside a ger - UlaanBaatar.

2–9 SEPTEMBER · DARKHAN, NALAIKH, ULAANBAATAR

Working across agency boundaries

Multi-casualty and road-crash workshops were conducted in Darkhan, Nalaikh and Ulaanbaatar. Ambulance doctors trained alongside NEMA rescue personnel and police. This joint work exposed a practical gap between rescue and medical response: rescue personnel could reach a patient, make the scene safe and begin extrication, but had limited preparation to provide medical first response while awaiting an ambulance.

Training therefore brought patient care, rescue and extrication into the same scenarios. The emphasis was on a patient-first approach to road crashes, clearer roles at the scene and earlier cooperation between services. At Nalaikh on 4 September, NEMA, police and 103 ambulance doctors worked together through trauma scenarios. On 9 September, a disaster-management exercise with senior NEMA personnel used a building-collapse scenario with entrapment and multiple casualties to test command and coordination arrangements.



Multi-casualty incident training, Ulaanbaatar, 8 September



NEMA disaster-management exercise briefing, 9 September

ESTIMATED TRAINING REACH

115 people in three activities

~80

EMS multi-casualty incident training, Ulaanbaatar, 7–8 September

Two days of trauma workshops for ambulance doctors, run with US Embassy colleagues alongside the National EMS Symposium, with triage and complex injuries in realistic scenarios.

~15

Multi-agency training, Darkhan, 2 September

NEMA road-accident training on a car roll-over, facilitated by Chief Reid. NEMA adopted a patient treatment first, extrication second approach.

~20

NEMA, police and 103 ambulance scenarios, Nalaikh, 4 September

NEMA and police worked the exercise together, and 103 doctors and NEMA practised trauma care with Dr Suvd Nergui, overseen by Joe Acker.

Approximately 115 people participated in the three principal training activities.

The workshops found that NEMA sometimes reached a crash first, made the scene safe and waited for the ambulance, with no patient treatment. The focus therefore shifted to treating the patient first, rather than making extrication the priority.



Darkhan, 2 September



Nalaikh, 4 September

6 SEPTEMBER · GOVERNMENT HOUSE, ULAANBAATAR

Taking the discussion to national level

The mission also created space for discussion about longer-term system development. Meetings with NEMA, the Mongolian Society for Emergency Medicine and other stakeholders examined emergency response, education and the relationship between health and disaster-management services.

The National EMS Symposium at Government House on 6 September brought these issues to a wider audience. Presentations addressed the 2018 EMS survey, professional paramedic practice, the integration of fire and emergency management, and the organisation of the British Columbia ambulance system. The value of these international examples was comparative. They were not presented as models to be copied without regard to Mongolia's circumstances.



National EMS Symposium, Government House, Ulaanbaatar, 6 September 2019

EQUIPMENT AND IN-KIND CONTRIBUTION

Practical support

The mission distributed ambulance response kits, safety equipment and other donated resources from Australia and Canada to EMS and NEMA personnel, including services in Mandal and other communities in Selenge Province.

~US$15,000
equipment (contemporary estimate)

~US$120,000
professional training and expertise (contemporary estimate)

These amounts were estimates recorded at the time. They describe the scale of in-kind support. The equipment was useful, but it did not replace the need for locally sustainable education, maintenance, governance and system development.



Defibrillator familiarisation at the Central Military Hospital, 5 September 2019

BY THE END OF THE MISSION

What the mission established

01 Built for Mongolia

EMS development had to reflect Mongolia's geography, workforce, resources and health system rather than reproduce a foreign model.

02 Prehospital education

Doctors entering ambulance practice needed education designed specifically for prehospital care.

03 Connected agencies

Ambulance services could not be strengthened in isolation from NEMA, police, hospitals and government.

04 First responders

Personnel likely to reach patients before an ambulance represented an important opportunity for first-response capability.

05 Local instructors

Local instructors and training systems were necessary if improvements were to continue between international visits.

06 Data and evaluation

Better operational data, monitoring and evaluation were needed to understand performance and guide future investment.

The contemporary work also considered medical retrieval, coordinated EMS and NEMA development, monitoring and evaluation, and online learning. Not every idea progressed in the form proposed at the time. Even so, the direction was important: the mission had moved beyond a short course and towards the connected elements of a prehospital system.

LOOKING BACK FROM 2026

The groundwork for EMS Global Foundation

Looking back from 2026, the mission's significance lies less in any single workshop than in the relationships and understanding built through the work. Time spent with ambulance doctors, rescue personnel, police, emergency physicians and government officials showed that sustainable EMS development required long-term partnership, local leadership, workforce development and evidence.

Those ideas helped shape the later development of EMS Global Foundation. The organisation that exists today is not the same as the 2019 project. The continuity is in the approach: start with the local system, work with the people responsible for it, and build capability that can be sustained within local circumstances.

2017
RELATIONSHIPS
Engagement established with Mongolian partners.

→

2018
TRAINING AND EVIDENCE
Training combined with early evidence gathering.

→

2019
SYSTEMS AND AGENCIES
Inter-agency coordination and system development.

The 2019 mission therefore sits at an important point in the program's history: 2017 established relationships; 2018 combined training with early evidence gathering; and 2019 broadened the work to inter-agency coordination and system development. That sequence provided part of the foundation for what followed.

IN PICTURES · SEPTEMBER 2019

2019

EMS GLOBAL FOUNDATION



Chief Darrell Reid and Canadian paramedic head Joe Acker with the Darkhan NEMA rescue team





Roadside sutures: Mongolian care without the need to transport to hospital



Dozens of Bayangol students dress in traditional costume to perform for the international visitors



Dr Suvd Nergui hands over donated equipment to the Mandal ambulance, Selenge Province

28 AUGUST TO 10 SEPTEMBER 2019

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Mongolia

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- Ministry of Health
- Mongolian Society for Emergency Medicine
- Nalaikh District Hospital
- National Emergency Management Agency
- Selenge Province Health Department
- Ulaanbaatar 103 Ambulance

Canada

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- Equipment donors in Canada

Australia

- Griffith University, Brisbane
- Equipment donors in Australia

International

- World Health Organization
- United States Embassy, Ulaanbaatar

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