

Traffic safety in humanitarian organisations

The effectiveness of road safety interventions – a research summary

Introduction

Fleet Forum is committed to reducing road traffic injury and death in humanitarian vehicle fleets.

In 2022, Fleet Forum conducted research into the effectiveness of road safety interventions. The research included:

- 1. A review of existing evidence and studies from 2011 to 2022
- 2. Interviews and focus groups with 15 participants from 13 humanitarian aid and development organisations

This report explores the question of how aid and development organisations manage road safety, investigating leadership practices, policies and road safety systems. It sets out findings and recommendations to develop a road safety culture.



Why road safety matters

Delivering humanitarian aid to communities effectively is core to the work of development and aid organisations. Staff who deliver aid often work in stressful and dangerous conditions in areas that are unstable and with limited infrastructure. Crashes pose a risk to individual drivers, an organisation's reputation and its ability to deliver aid effectively.

Yet the impact of road crashes on humanitarian organisations is not well understood. Incidents are often managed on an individual basis, with limited data collected and analysed to identify opportunities for systemic change.

By understanding the risks and impacts of poor road safety, organisations can take steps to monitor incidents, improve practice, build trust with communities and reduce risk, developing a safety culture.



The research methodology:

Primary research:

- 13 small, medium and large humanitarian organisations took part
- 15 participants interviewed, including international HR managers, country managers and specialists in security/risk management
- One-to-one interviews
- Focus groups

Secondary research:

- Review of evidence from 2011 to 2022
- Database searches and reviews of similar topics
- Analysis of quality of evidence
- Systematic review to summarize all known knowledge on work-related road safety

THEME 1 Leadership and culture

Research evidence

Primary research highlighted the importance of leadership and the role of senior managers in creating a positive safety culture.

Comments included:

"Culture needs to start at the top."

"Culture must be demonstrated and evidenced in how senior managers behave."

Comparative research of safety cultures in different organisations also highlighted evidence that organisations with a strong safety culture and compliance with safety rules have better outcomes. Benchmarking is a common systematic approach to establishing a baseline and measuring performance, compared to peer organisations.

Research evidence for measurement of safety culture and leadership is very limited. However, organisations with a strong management commitment to safety have reported low road traffic crash rates.

Case study examples

One research interview participant told us about the impact of leadership on an organisational culture of safety.

"The single most important factor is supervision. How knowledgeable about what's going on, how close they are to the day-to-day operations and therefore understand what they need to focus on and where things can go wrong and being all over at ground level, and how well informed their bosses are as well of what they're doing and how they're doing".

Another commented, "Driver training, data management, proactively managing drivers who are identified as speeding regularly - all of those things on their own aren't going to change anything. This has to be a culture change. There must be constant consistent messaging around these issues".

These comments demonstrate the need for organisation-wide monitoring to build understanding of safety issues and identify opportunities for improvement.

Recommendations



Record and monitor road safety information across the organisation to identify patterns, areas for improvement and good practice.



Put road safety at the heart of organisational priorities.



Senior leaders should model good safety practice.



Invest in safety management resources.

THEME 2 Crash management

Research evidence

Crashes can have a significant impact on humanitarian organisations, causing injury, loss of life, service interruption and reputational damage. Understanding the cause of a crash is key to prevention in the future. The use of technology to monitor drivers has increased significantly in the last 20 years. However, evidence of its impact on safety is sparse and research participants reported varying levels of telematics use.

"We can look at any vehicle anywhere in the world and see where it's going, what speed it is travelling at, and we can look if there's been an accident in that vehicle. All country offices have access to it, but some countries are more engaged than others."

Telematic systems can monitor driver behaviour and give feedback in real time. They can also provide cumulative data to monitor behaviour over time. One research study of 800 vehicles demonstrated a 20-30% reduction in crashes using telematic systems.

Case study example

The FloowCoach driver coaching programme provides interventions based on telematics monitoring of driver behaviour. A 2019 evaluation of FloowCoach found that drivers who participated in the coaching programme made 12.5% fewer insurance claims, suggesting that using telematics alongside coaching can lead to behavioural change.

Recommendations



Develop an organisation-wide approach to the use of telematics and ensure that telematics systems include feedback loops to drivers to improve performance.



Ask telematics providers for hard evidence of safety impact. Use this evidence to inform your organisational approach to telematics.



Monitor and evaluate implementation of crash management interventions at local and organisation-wide levels.

THEME 3 Intervention effectiveness

Research evidence

The research studies reviewed evidence of a wide variety of safety interventions. However, evidence of effectiveness was limited, due to the challenges in carrying out scientifically robust research.

Interventions include:

- Seatbelt compliance
- Adjusting the size of vehicles used
- Controls on speeding
- Driver selection, training and incentives
- Monitoring fatigue, drug and alcohol misuse

Skills-based training for drivers was reported as a popular intervention by many research participants. However, research did not show it as effective unless it included group discussion. Similarly, many organisations use incentive schemes to promote a safety culture among drivers.

One research participant commented, "we've been working with an international road safety training provider to develop a driver training program to improve hazard recognition and reduce crashes".

However, safety is not the concern of drivers alone. As one research participant pointed out, "you need to think about all the components of the system, not only the human factor".

Case study example

At the Greyhound Lines US Bus Company, 33% of all vehicle collisions between 2013 and 2014 involved newly hired drivers. In 2014, Greyhound introduced a profiling tool to target new driver training based on risk profiles. In the first year of this intervention, vehicle collisions involving new drivers fell from 33% to 19%. In addition, Northeastern USA, which was Greyhound's worst performing area with adverse weather conditions and high congestion levels, reported a 51% drop in collisions between 2014 and 2016.

Recommendations



Review evidence of the effectiveness of interventions from your own and other organisations.



Develop a strategic approach to implementing new interventions organisation-wide and at local level.



Implement the group discussion approach as an effective behavioural intervention to improve fleet safety



Devolve authority to local safety leaders who understand regional context.

THEME 4 Changing the safety culture

Research evidence

Research and evaluation can contribute towards building the evidence base for a road safety culture. Internal and external communications were identified in the research review and primary research as influencing a culture of safety, with top-down and bottom-up messaging both important.

A management commitment to safety was found to be important. Research participants also highlighted the importance of "good quality data for analysis and identifying the problems, and then creating communications based on that".

The research review found examples of communications campaigns that were developed by organisations for behaviour change. However, there was no firm evidence that these interventions improved road safety.

In the primary research, participants noted communications campaigns targeting drivers and other staff, to develop understanding of challenges faced. As one participant noted, "the role of managers is very important because they are the one sponsoring both the safety events and all the training". While another commented, "it's a communication campaign all the way".

Case study example

The International Committee of the Red Cross and Red Crescent (ICRC) has developed a fleet safety programme to reduce risk for staff travelling from one place to another. The programme aims to raise awareness of the risks to avoid and to manage crashes better, defining a clear process when a crash takes place.

The programme includes data collection, monitoring and analysis, placing road safety as a shared responsibility for all staff.

Recommendations



Use data to build the business case for road safety.



Demonstrate a commitment to road safety at all levels across an organisation, ensuring senior leaders model good practice.



Develop a communications programme to make staff at all levels aware of each other's challenges and find solutions.



Develop a policy approach to influence governments in developing countries to improve legislation, policy and practice.