

# Driver miraculously survives being impaled by a falling tree:

## *Beyond success: Navigating complexity in emergency rescue operations*

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During a recent storm in Bloemfontein in the Free State, South Africa, a tree fell on a light commercial vehicle close to the Bloemfontein Stadium and impaled the driver. His wife and child were uninjured during this ordeal.

It was important for me to convey a message that goes beyond the conventional understanding of success in emergency rescue operations and specific this scenario. While success is typically associated with achieving positive outcomes, this title suggests that success in this context involves more than just the result. It implies a journey through complexity, challenges and intricacies inherent in emergency rescue situations.

In this rescue scenario, the term 'beyond success' there was a deeper layer to be explored; a realm where the complexities of rescue emergency operations come to the forefront. 'Navigating complexity' did emphasise our skill, strategy and careful planning required as to navigate through intricate situations.

During our rescue operation there were some key aspects of navigating complexity in the emergency rescue operations: Our organisation and coordination did require clear roles and responsibilities, as well as well-defined procedures and communication channels; it did help us to avoid confusion and ensures that all parties involved are working towards a common goal.



The rescue team training and preparedness were well-trained and equipped to handle this situation. This includes not only the rescue team physical skills but also mental preparedness and resilience to withstand the stressors encountered during this rescue scenario.

One of our key successes was to collaboration with other agencies successful.

### Introduction

Henry Ford's famous quote, "If everyone is moving forward together, then success takes care of itself," encapsulates the essence of teamwork and unity.

However, in the realm of emergency rescue operations, especially within highly skilled teams like those at Free State EMS and Mangaung Fire and Rescue Department and private EMS operation, success demands more than mere forward momentum. It necessitates a profound level of professionalism, experience, commitment and precision teamwork.

### The challenge of unique rescue scenarios

In the intricate world of emergency response, every rescue scenario presents unique challenges. The success of operations depends on the preparedness, training and coordination of the EMS, fire and rescue teams involved. The recently faced highly complex extrication situation in Bloemfontein Free State underscores the critical importance of these factors.

### Risks and considerations in tree-related rescues

The danger of a tree falling on a



vehicle adds significant risks to occupants, rescue teams and bystanders. In the described scenario, potential dangers included occupant injuries, fire hazards, entrapment, secondary accidents, crushing damage and environmental impacts. Managing these risks required a meticulous approach, considering immediate dangers, extrication challenges and potential psychological toll on the rescue team.

### Complex extrication scenario

The entrapment and entanglement of a patient with a tree branch through the body presented formidable

challenges, especially affecting the pelvis and femoral artery. Additional considerations, such as critical medical situations, extrication plans, medical interventions, space creation, patient stabilisation and communication, were paramount in navigating the complexity of the scenario.

### The need to get back to the basics

What a wonderful idea and when the rescue team say such things in team performances or at debrief sessions, it sounds like such a moment of brilliance and knowledge.

BACK TO BASICS



of careful planning, clear communication and seamless teamwork. Despite facing unprecedented challenges, the team exhibited resilience and determination, ensuring the success of the operation. Through multiple operations, coupled with brilliant patient care, the patient emerged from the ordeal triumphantly, symbolising the culmination of dedicated efforts.

Key points

Meticulous planning: Success in emergency rescue operations hinges on comprehensive planning, considering various contingencies and challenges that may arise during the mission.

Effective communication: Clear and efficient communication among team members is paramount, ensuring seamless coordination and swift response to evolving circumstances.

Unwavering teamwork: Team cohesion and collaboration are indispensable, particularly in high-pressure situations, where every member's contribution is integral to achieving the mission's objectives.

Commitment to basics: Amidst the complexity of rescue operations, adherence to fundamental principles and protocols remains crucial, serving as the bedrock for successful outcomes.

Continuous improvement: Reflection and learning from past experiences are essential for enhancing performance and adapting to evolving challenges, reinforcing



Back to basics: essentials of rescue team success

Amidst the intricacies of rescue operations, a call to "get back to the basics" emerges as a beacon of wisdom. Communication, teamwork and planning stand as the fundamental pillars of success in any rescue team effort.

Evaluating the efficacy of these basics becomes essential for any department and partnering with organisations like The Ripple Effect can be instrumental in reinforcing these foundational elements.

Leadership skills in emergency response

Leadership in emergency response demands a multifaceted skill set. Effective communication, motivational prowess, keen observation and leading by example emerge as key attributes for an incident commander (IC) leader.

The ability to navigate conflicts, provide constructive feedback, maintain team morale during non-emergency periods and prioritise the well-being of the rescue team contributes to the success of operations.

Summary

The recent extrication scenario underscored the significance

the importance of ongoing training and development.

Conclusion

In the dynamic world of emergency rescue, success is not a mere by-product of forward movement. It is an outcome of meticulous planning, effective communication and unwavering teamwork, even in the face of unprecedented challenges.

The recent extrication scenario serves as a testament to the indispensable role of skilled professionals and the need for continuous reflection, improvement and a commitment to the basics to ensure success in every rescue operation.

The successful extrication and recovery and numerous operations of the patient exemplify the culmination of meticulous planning, effective communication and unwavering teamwork. This experience underscores the invaluable role of skilled professionals in emergency rescue and emphasises the need for continuous improvement and a steadfast commitment to core principles.

As the patient steps out of the hospital, it serves as a poignant reminder of the positive impact of dedicated efforts in ensuring successful rescue operations.

I wish to acknowledge the following services who taught me the true meaning of the word 'teamwork' stands for 'together everyone achieves more': Mangaung Fire Department EMS Department of Health EMS private sector South African Police Mangaung Traffic Department.

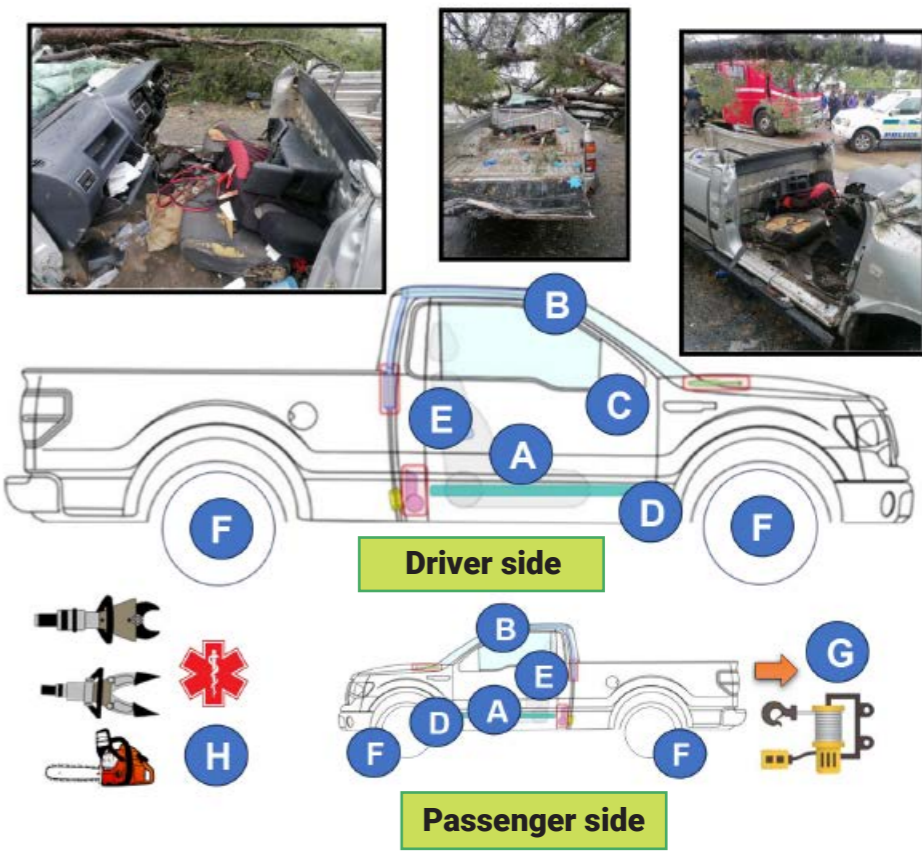




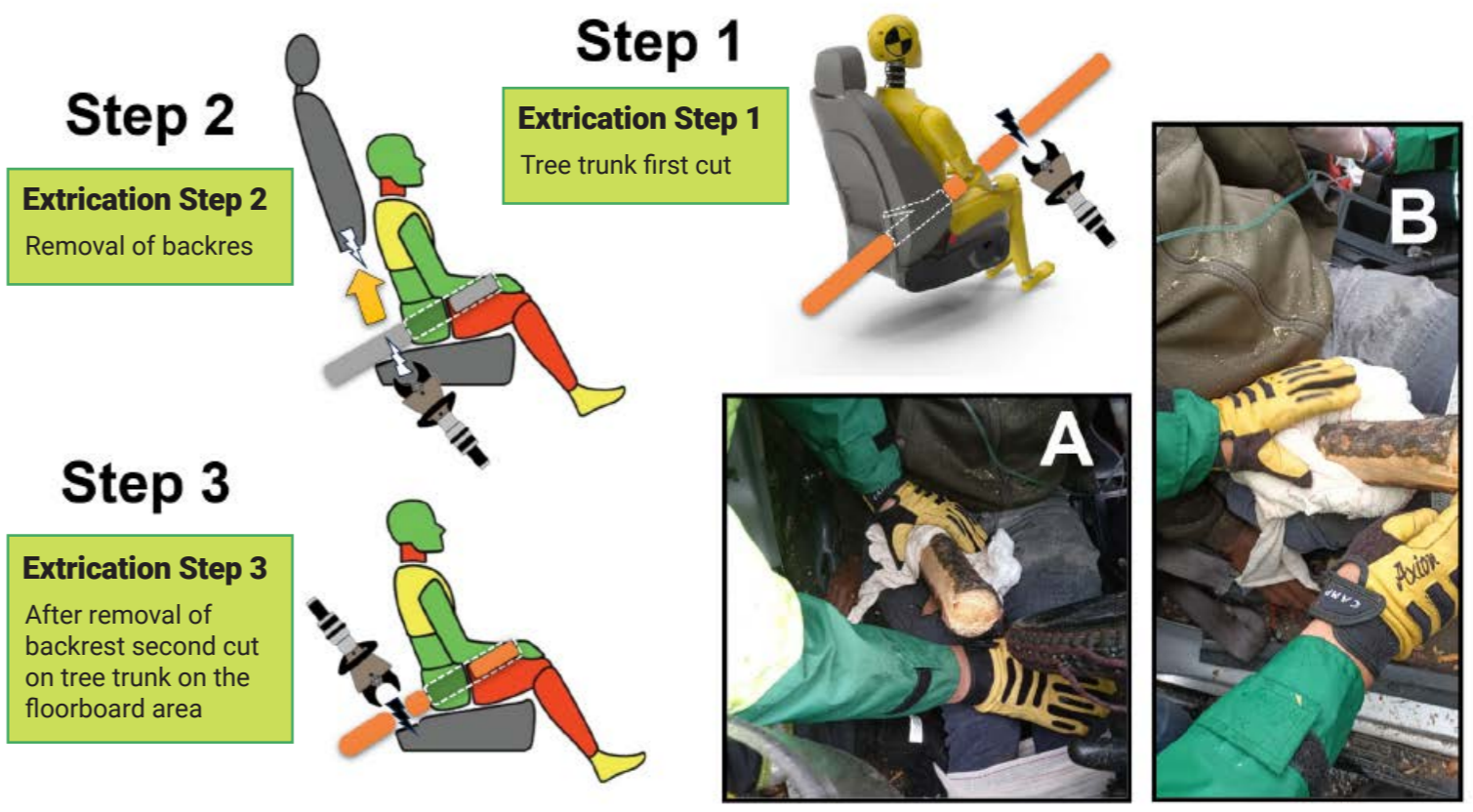
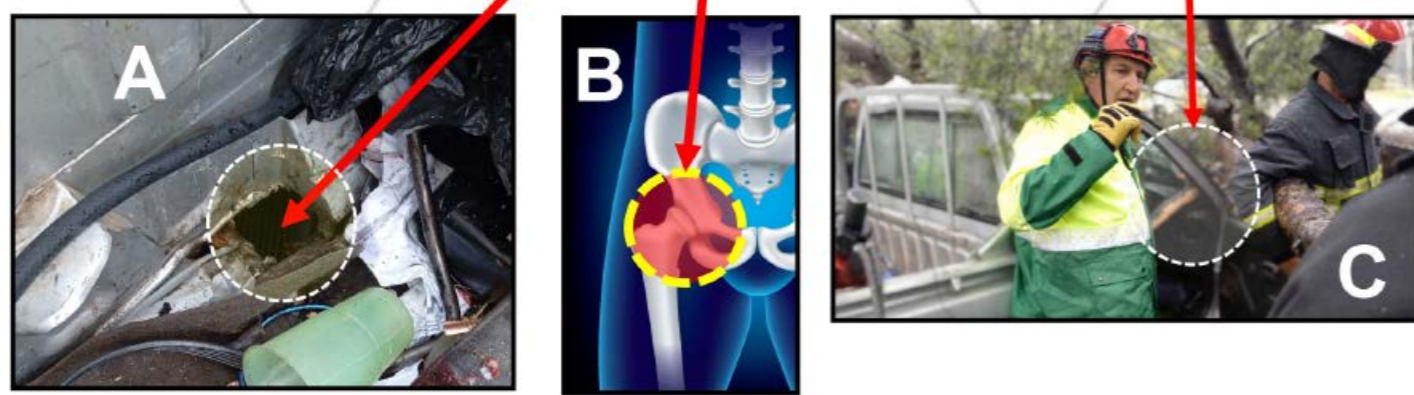
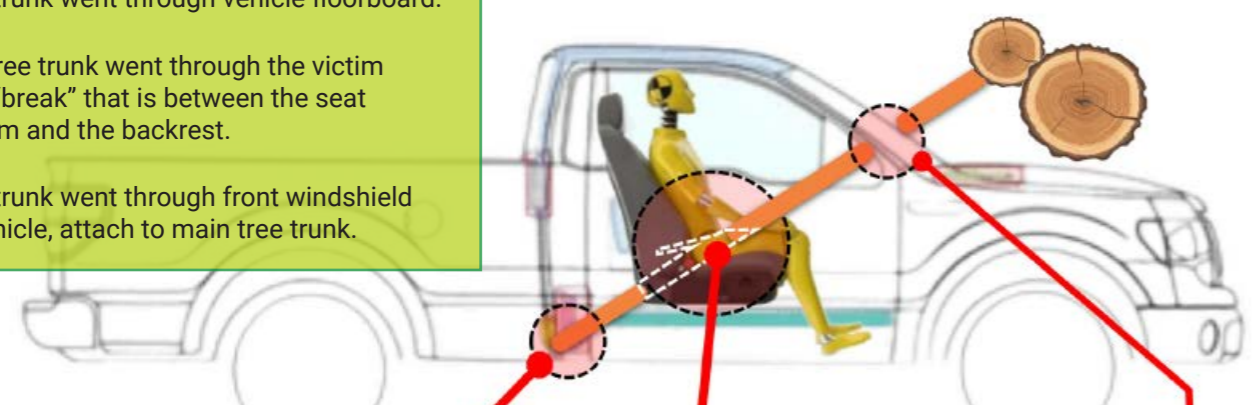
**Victim Entanglement**  
 A plan of rescue was made. "First, we had to stabilise the car because the tree were on top of the car and tree branch went through and penetrating the car and penetrating the patient and leaf the victim trap in the car with external femoral bleeding."



**Victim Entrapments**  
**A** = Removed doors left and right  
**B** = Removed roof and front laminated windshield.  
**C** = Removed steering collum with airbag constrainer in place.  
**D** = Dash displacements allow to free victims from secondary entrapment created by the dash area and make additional space for the path for CPR egress and victim removal plan B, plan A was victim removal on passenger side.  
**E** = Removal of the backrest the tree trunk went through the seat "break" that is between the seat bottom and the backrest.  
**F** = After removal of backrest second cut on tree trunk on the floorboard area, then then secondary vehicle stabilization flatten all four car tyres of the vehicle. The vehicle drop under the main tree trunk.  
**G** = The vehicle free from the main tree we pull the vehicle back 2m for more working space, patient stabilisation, patient packaging and more work safe area.  
**H** = Equipment used:  
 • Chainsaw  
 • Hydraulic spreader  
 • Hydraulic cutter  
 • Advance medical equipment



**Victim entrapments**  
**A** = Tree trunk went through vehicle floorboard.  
**B** = The tree trunk went through the victim seat "break" that is between the seat bottom and the backrest.  
**C** = Tree trunk went through front windshield of vehicle, attach to main tree trunk.



### Principles of patient packaging

- Must be able to monitor injury or illness
- Assess CSMs, Vital Signs, Mental Status, access O2, IV and ECG
- Communication with patient must be maintained
- We did secure patient from movement along linear and horizontal and vertical axis
- We did protect patient from soft tissue injuries secondary to transport
- We did pad patient in all directions to avoid movement with transport
- Create a sleek, compact package for movement of patient to spine board, ambulance stretcher and ambulance

