HOW SAFETY MAKES THE DIFFERENCE

EMS providers face unique challenges and risks within their role while providing care to their communities. It is reported that EMS providers in the United States are approximately five times more likely to suffer transportation-related injuries than the national average.¹ With information such as this emerging, EMS organizations in recent years have taken steps to increase safety measures for EMS providers and patients.

Safety is a vital aspect of the work environment for EMS providers and as their roles evolve in the healthcare industry, measures to increase safety in the field need to evolve at the same pace. This article will discuss several approaches that should be considered to increase safety across the field.

1. Safety While Handling Patients

EMS providers are responsible for repeatedly lifting and carrying heavy amounts of equipment and patients, which can result in longterm health impacts. The National Institute of Occupational Health and Safety (NIOHS) conducted a 4-year study which concluded that body motion, such as repetitive movements and awkward posture, were the most common causes of EMS workplace injuries.² By integrating medical equipment mounting solutions which enable EMS providers to secure their equipment to the stretcher/cot, it can help decrease the potential of providers being subject to injury.

Improved safety measures while handling patients go beyond medical device management; it is equally important to protect emergency staff from patients potentially contaminated with infectious respiratory diseases and/or other airborne transmissible diseases. As solutions evolve to meet the needs of developing healthcare practices, stretcher system solutions acting as a supplementary form of Personal Protective Equipment (PPE) should be considered as a fundamental piece of equipment, supplying providers with an additional barrier of protection.

2. Safety During Transport

EMS provider and patient safety during transport is an area in which the industry has heavily invested in. Much of the progress made and improved safety standards have been focused on ambulance features, notably within the patient care compartment. However, safe transport extends beyond the ambulance construction; it includes properly securing medical equipment and other flying objects when inside the ambulance. As the use of straps to secure medical equipment is common practice in the industry during transport, the integrity of this transportation method must be called into question as it does not adhere to industry safety recommendations. The same must be done for overloaded IV poles temporarily installed on stretchers over patients.

SAE International (Society of Automotive Engineers), a professional association and standards developing organization that creates and manages standards for ground and aerospace vehicles, released in 2014 recommendations regarding safety standards for ambulances. SAE International recommends 9 testing standards for ambulances, including SAE J3043 – Ambulance Equipment Mount Device or System.

Mounting systems which are SAE J3043 certified ensure medical devices remain secure during transport in case of sudden directional changes or collisions, avoiding possible injury to EMS providers and patients, and costly repairs or replacements of medical equipment. By complying with SAE J3043, a mounting system is also compatible with KKK-A-1822F, NFPA-1917 and BS EN 1789 under similar conditions.³

As SAE J3043 certified mounting systems must meet the 22.5G minimum required resistance rating, it is important to evaluate solutions which exceed this minimum requirement with a certification process completed by independent third-party organizations in order to avoid bias.

As large, unsecured medical equipment and other flying objects can become dangerous projectiles in an ambulance deceleration or impact, securing them with above average G resistance rated mounting systems to the stretcher/cot, ambulance counter or wall can make the difference between a safe or fatal environment for providers and patients.

3. Safety Provides a Peace of Mind

EMS providers often find themselves in highly stressful and tiring situations when serving and protecting their communities. As a In addition to increased training and safety procedures, ensuring the proper storage and installation of medical equipment in mounting systems during patient transport can contribute greatly towards improved workplace safety culture. EMS providers can be confident that the equipment will remain secure in the case of an ambulance accident, or directional change, protecting themselves and patients; therefore, enabling them to focus on patient care.

patient and provider harm and reduce risk.4

In Critical Care Transport (CCT) environments, it can be challenging for EMS providers to transport large volumes of medical equipment required for patients. Through the implementation of scalable stretcher and/or surface mounting systems for improved medical equipment management, this source of stress can be alleviated. In addition, the risk of damaged or forgotten equipment on site will be reduced.

Conclusion

Improving safety for EMS providers involves many aspects such as patient handling, transportation, and providing a culture of safety. As EMS organizations place more emphasis on safety, it is important to consider safety standards for portable medical device management. Integrating the right mounting solution can help decrease injuries for EMS providers, increase safety during transport and improve their general wellbeing. Taking this comprehensive approach to safety makes the difference for EMS providers, enhancing the overall level of care for patients. What steps are you ready to take to increase safety?

References

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About Technimount System

Technimount System designs and develops mounting solutions that provide first responders and healthcare professionals with a complete system for portable medical device management during patient transport.

Technimount's unparalleled universal mounting system can fit multiple brands, models, and applications of portable medical equipment in ambulances, stretchers and cots in hospitals, EMS, and military environments.

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