THIRD QUARTER 2018

SafetyMatters

A quarterly, collaborative publication from MedFlight and HealthNet Aeromedical Services



By Justin Koper, MA, MTSP-C, FP-C Safety Officer, HealthNet Aeromedical Services

This marks my twelfth year in EMS. I've been doing a lot of thinking on how far I've come in my career and where it will continue to go. (You're probably still confused about the title and looking for bank robbery tips. It will all be explained in due time.) Over the years, there have been pranks on co-workers, friendships made, thousands of lives impacted and I even met my wife on the job. But, there has also been heartbreak, tragic events, nightmare-inducing calls, uncertainty about the future and constant concern about the effects of this career on my long-term health. My story is not unique in this industry and is far less complicated than many others in EMS. However, it still begs the question: How do we cope with the ups and downs of a life spent serving others?

This is where the bank reference comes in (sorry, but you won't find any tips on safe cracking here). I liken our ability to cope with stress to the amount of money that a bank has in its vault. Positive events or positive stresses (called eustress) deposit more money into the vault. Conversely, negative events or negative stresses (called distress) take money out. The whole goal is to maintain an equilibrium of deposits and withdrawls. When we struggle to identify the positives, we are left constantly making withdrawls. Each of these withdrawls chip away at our ability to cope with further stresses. Eventually, we get to a point that we are operating so far in the negative that we have lost the ability to cope with simple things such as a busy shift, a stressful call or busy family schedules. At this point, the robbers have entered the bank only to find an empty bank vault that owes everyone

else money. Any bank operating like this would just shut down and cease to be. Those providers that we call "burned out," insensitive or impersonal may just be at a point where the stress of a normal day is just too much to cope with.

So, how do we help those individuals and how do we prevent getting to that point in the first place? First, we as an industry need to abolish the stigma surrounding counseling and therapy. EMS providers consistently see the worst society has to offer, and we also see things that would be considered too graphic for even the goriest of horror films. It is absurd to think that we can see other humans in such situations without needing to decompress after the event. The "suck it up" mindset just needs to go away. Each person has their own backstory, so events will trigger emotional responses differently amongst EMS practitioners. Second, you need to acknowledge that things may not get better on their own. Lastly, you need to know where to go for help.

Check with your company's Human Resources Department to see what programs and resources may be available to you through your organization.

The Code Green Campaign is a first responder oriented mental health advocacy and education organization with help and resources available on its website www.codegreencampaign.org.

If you need immediate help: **Fire/EMS Helpline** 1-888-731-3473 **National Suicide Prevention Lifeline** 1-800-273-8255 ■

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Mission. Ready.

Mock Helicopter Crash Teaches Lifesaving Skills

Article courtesy of *The Logan Daily News* By Beth Lanning

WARD TOWNSHIP — Teamwork made a mock helicopter crash exercise a success in Hocking County as first responders gained invaluable experience.

MedFlight Safety Officer and Outreach Coordinator Amanda Ball said this week they simulated a "mock crash," off of Carbon Hill-Buchtel Road.

"The flight crew was under the impression they were responding to a local emergency in Hocking County. Then they were told it was a 'downed aircraft' drill while in the air," Ball explained. "We decided to place the emergency landing zone on rural and wooded private property so the flight crew's selfextrication, location, and survival skill sets could be evaluated."

MedFlight's exercise included help from the Logan Fire Department, Hocking County Emergency Medical Service, Hocking County 911, MedCom, and Ward Township Fire and Rescue.

According to the Ward Township Fire and Rescue's Facebook page, MedCom was able to retrieve the medical helicopter's location through GPS technology. From there, Hocking County 911, LFD, Hocking EMS and Ward Township's crew were dispatched to the location.

Ball noted that through aviation GPS tracking, called IRIS, the dispatch center was able to locate the downed aircraft where it landed. She added that the flight crew vocalized how they would contact the dispatch center via radio, locate themselves, safely shut down the aircraft and self-extricate.

"Not only were the flight crew's processes evaluated, but so were the emergency responses of our dispatch center, our leadership and our aviation vendor," she continued. "But we also wanted to include fire, EMS, and 911 departments in Hocking County so we could see the overall multi-jurisdiction response to an event of this kind."

Hocking County EMS Chief Scott Brooker said it was very beneficial to have the exercise and it was conducted as real as possible.

"It was more like an emergency landing/hard landing. There is a whole series of events that evolve after that," Brooker commented. "It was quite interesting because when they did the mock mayday, MedCom had to locate them so they know where to locate them and send help to them."

Brooker explained the mock helicopter crash exercise was beneficial and kind of unique at the same time.

"A lot of times we're calling for air medical support when we have critical patients. We don't think about necessarily that the air medical service needing help themselves," Brooker noted. "You also have to think whether or not the air medical service will need more air medical helicopters to transport them. Are the resources going to be available?"

Plus, Brooker said there could also be a patient in the medical helicopter who needs help as well.

If it were a true helicopter emergency, there is a possibility of it catching on fire. LFD Chief Brian Robertson said he gained a wealth of knowledge from the exercise.

"It was very informative. It went over many safety procedures like how to use the fuel shutoff," Robertson expressed.

The fire chief was also briefed on how much fuel the medical helicopter was carrying, where to read the fuel usage, and where to find the electrical shutoff and emergency shutdown switches.

"If they do a hard landing and the aircraft is still running — these are the things we need to do to shut the aircraft down," the fire chief explained. "We learned some stuff we didn't know."

In any emergency, communication is key and the Hocking County 911 staff assisted in the mock helicopter crash exercise.

"They were testing their pilots and their communication center. They



MedFlight 6 Team Pilot John Massey, Flight Nurse Tyler Altier and Flight Paramedic Mike McNamara.



The multi-jurisdictional response included Ward Township Fire Department, City of Logan Fire Department, Hocking County EMS and Hocking County 911.

requested help from us after they realized their helicopter was doing a hard landing," said Hocking County 911 Director Sandy Wintermute.

Wintermute said they dispatched for help while following the protocol set in place for that type of incident.

"A crash is possible. We have two helicopter services that service Hocking County. Plus, all the other helicopters that travel through the area," Wintermute stated. "It's kind of in the back of everybody's mind. It's good to practice what to do."

"We want these responses at MedFlight to be second-nature so if an emergency does occur, we are ready. Preparedness allows for a quicker response and safer conditions," Ball concluded.

The Heat Is On!

by Bev Meade, DNP/HSL, RN, MHA, CEN, CCRN, CFRN, CTRN, TCRN, Paramedic, Flight Nurse, MedFlight

Years of transport experience have taught me to prepare for my workday long before I arrive for a shift. Along with ensuring that I am well rested and my physical needs are met, I do my own at home "weather check" as I have my first cup of coffee.

"It's going to be a hot one" was the popular phrase among local news meteorologists during one of the warmest forecasted days this summer. Those words are always worrisome because I fully understand the dynamics of heat and the impact they have on air medical transport, the crew members and the patients who are entrusted to our care. The heat and humidity on this day was more than I had prepared for as the busy day progressed from "nice and warm" to "hot and humid."

As an experienced medical professional, it took me longer than it should have to recognize that I was suffering from heart exhaustion. I thought I had consumed enough fluids and did not readily recognize that my headache and fast heart rate were due to dehydration. I assumed it was from the heat itself. However, looking back, I see now where I failed to let my fellow team members know that I was not feeling as well as I should be. Communicating in the air and on the ground transports regarding patient care and identifying hazards is part of what we do in the HEMS environment. What is equally important is communicating when a team member is experiencing a less than optimum wellness.

When we arrived back to our base after our patient transport, I continued to drink water and stayed in the air conditioned space at our base. My treatment included calling our Regional Director to request a much needed "crew rest" for myself and my team as I recovered from the heat exhaustion. At MedFlight, we have a safety responsibility to remove ourselves from responding to requests for a designated "safety" time-out that allows us to rest, rehydrate and regenerate physically so that we may continue providing the highest quality care for our patients.

I was able to avoid the continued consequences of heat exhaustion and halted the progression to heat stroke because I recognized the signs and symptoms of this heat-related illness.

HEAT EXHAUSTION WHAT TO LOOK FOR

Heavy sweating Cold, pale and clammy skin Fast, weak pulse Nausea or vomiting Muscle cramps Tiredness or weakness Dizziness Headache Fainting

WHAT TO DO

Loosen your clothes. Put cool, wet clothes on your body or take a cool bath. Sip water. Seek medical help right away if: You are vomiting. Your symptoms get worse. Your symptoms last longer than on hour.

HEAT STROKE

WHAT TO LOOK FOR

- High body temperature (103°F or higher)
- Hot, red, dry or damp skin
- Fast, strong pulse
- Headache
- Dizziness
- Nausea
- Confusion
- Losing consciousness (passing out)

WHAT TO DO

Call 911.

- Move the person to a cooler place.
- Lower the person's temperature with cool cloths or a cool bath. Do not give the person anything to drink.

References

Centers for Disease Control, (2018). Heat-related illnesses. Available: http://www.cdc.diasters/extremeheat/workers.html

Surface Disinfection

Karen Swecker, RN, CIC Exposure Control Liaison, MedFlight

An important part of safety operations is keeping patients safe from easily transmitted bacteria. The aircraft, just like the ambulance, becomes easily contaminated with many different potentially pathogenic bacteria: MRSA, VRE, C. difficile, and all the other multi-drug resistant organisms (MDROs). It is important to decontaminate the aircraft after each patient transport as well as complete weekly deeper cleans.

Decontamination means the removal of or neutralizing bacteria from surfaces and objects. The decontamination process starts by wiping all surfaces to physically remove any debris. It is important to read the labels to ensure the products used are safe for the surfaces. For example, saline could be used to wipe down surfaces, but it is damaging to instruments.

A surface that isn't cleaned, but is wiped down with a disinfectant, is not decontaminated. If a blood glucometer is not cleaned of dried blood and just wiped down with a disinfectant, it can still cause potential infections. Hepatitis B remains infectious in dried blood for at least seven days. Surfaces must be thoroughly cleaned before any disinfectant is applied.

Have someone observe your process. Were you wearing gloves to provide patient care and then touched the radio control knobs or control box to give a report? If so, you have just contaminated the radio with bacteria from the patient. Gloves, like bare hands, easily transfer pathogens from surface to surface. After transfer of a patient, make sure to wipe all surfaces not in direct contact with the patient such as door handles, sled knobs, chin straps and the sides of helmets.

When choosing a disinfectant make sure to thoroughly read the instructions to ensure you are properly using the product. Labels will list what type of disinfectant is in the product, what type of bacteria is killed and how long it takes to kill. A product listed as tuberculocidal will kill Mycobacterium within the time limit listed. While Mycobacterium is not transmitted from surfaces; these bacteria are very hard to kill. The standard is if Mycobacteria is killed, all other bacteria will also be eliminated within the same time frame. The one exception to this is highly transmissible Clostridium difficile (C. diff). Hand sanitizer is not effective; therefore, care providers must wash hands with soap and water. A bleach product must be used to effectively kill C. diff on surfaces. Unfortunately, bleach is very corrosive to many surfaces and care should be taken. Check equipment manufacturers before using a bleach product. Bleach products should **NOT** be used on surfaces in aircraft. When transporting a patient with diarrhea, make sure to change gloves frequently and do not touch any surface with gloves used for patient care.

A few resources available for reference:

The Guide to Managing an Emergency Service Infection Control *Program*, U.S. Fire Administration www.usfa.fema.gov/publications

Infection Prevention and Control Guidance for EMS Providers, Metropolitan Chicago Healthcare Council

www.APIC.org

Between a Rock and a Hard Place: Integrating Change Across the Healthcare Industry

Jeff White, M.S., MTSP-C, FP-C

Director of Safety, HealthNet Aeromedical Services

Attempting to get in front of the coming changes to EMS as an industry and implement safety regulations from aeromedical, general industry, transport and healthcare is no easy feat. We have faced a multitude of challenges attempting to change the culture and mindset of EMS providers being guided by the National Strategy for an EMS Safety Culture released in 2013 by NHTSA and NEMSAC. It appears that EMS, as an industry, is going to be required to lead the charge in evolving the mindset and culture of hospitals and the insurance industry to advance all the needed safety and operational changes for EMS providers.

When EMS began, it was merely a transport service with very little focus on bettering patient care. Over the last 40 years, our mission and responsibilities have dramatically changed and continue to grow. While our operational scope has changed, the insurance industry and hospitals view of us has changed very little. We must get them to invest in our process as we begin molding our industry into mainstream healthcare and away from just strictly transport. This will ensure a strong working partnership that will ultimately benefit our patients and EMS field crews.

The other hurdle we will face is regulation. There is no single agency governing EMS. We as an industry must come together and assist in the development of a governing body before it is done for us. Among the organizations trying to take the lead are AAMS, NAEMSMA, NAEMT and NREMT. The challenge is getting all these agencies on the same page. We need to find a way to take care of ourselves which will lead to even better care of our patients. Isn't that why we all got into this?

Important Safety Initiatives August 2018

August	National Immunization Awareness Month	Centers for Disease Control & Prevention	<u>cdc.gov</u>
August	Back to School Month	National Safety Council	nsc.org
August	Children's Eye Health & Safety Month	Prevent Blindness America	preventblindness. org
Aug. 13- 19	Safe + Sound Week	Occupational Safety and Health Administration	osha.gov
Aug. 17- Sept. 3	Drive Sober or Get Pulled Over	National Highway Traffic Safety Administration	nhtsa.gov

September 2018

September	National Alcohol & Drug Addiction Recovery Month	Substance Abuse and Mental Health Services Administration	recoverymonth.gov
September	National Preparedness Month	U.S. Department of Homeland Security	ready.gov
September	National Food Safety Education Month	National Restaurant Association Educational Foundation	foodsafetymonth. com
September	Sports Eye Safety Month	Prevent Blindness America	<u>preventblindness.</u> <u>org</u>
Sept. 16-22	National Farm Safety and Health Week	National Education Center for Agricultural Safety	necasag.org
Sept. 17-23	National Child Passenger Safety Week	National Highway Traffic Safety Administration	nhtsa.gov
Sept. 23-29	Fall Prevention Awareness Week	Fall Prevention Center of Excellence	stopfalls.org

www.CDC.gov



Vehicle Rollover Prevention

Emergency vehicle rollovers are an all too frequent cause of vehicle damage, serious injury and fatalities. Very often, however, these incidents are of a highly preventable nature. All emergency vehicles are subject to rollovers, but tankers, pumper tankers and ambulances are particularly vulnerable because of their high center of gravity.

The simplest method of prevention is for the emergency vehicle driver to simply slow down. Excessive speed greatly reduces the driver's ability to control the vehicle on curves or when making evasive steering moves. Driving at a reduced speed will increase the driver's ability to keep the vehicle under control during a wider range of circumstances. Excessive speed increases the likelihood that the weight will shift and cause the vehicle to be uncontrollable.

In addition to excessive speed and shifting weight, another leading cause of vehicle rollover is oversteering after dropping off the road surface onto the shoulder of the road. Oversteering will cause the vehicle to rollover by causing the weight to severely shift from one side to the other and/or by the vehicle tires gripping the road at an excessive angle once brought back off of the shoulder.

The potential for this type of incident increases as the difference in height between the road surface and the shoulder increases. The greater the difference in height, the greater the angle of steering must be applied to overcome the resistance of the road surface against the tires of the vehicle. Once the tires are at a great enough angle to overcome the resistance and return to the driving surface, they will either grip and shoot the vehicle in the opposite direction, or will buckle and roll. Either way, the results are the same ... a wrecked vehicle.

The following safe driving points will increase the emergency vehicle driver's ability to maintain control of their vehicle should he/she run off of the road surface onto the shoulder.

Things To Do

- $\,\,\,^{\&}\,$ Take your foot off of the accelerator and allow the vehicle to slow down gradually.
- Do not apply full braking! Use soft application of the brakes, natural deceleration and downshifting to bring the vehicle to a safe speed or complete stop.
- 🕹 Under soft shoulder conditions, feather the accelerator to help maintain control of the vehicle while slowing.
- Once the vehicle has been stopped or been brought down to a safe speed, gently steer the vehicle back onto the road surface using a lower gear and/or feathered acceleration to assist in overcoming the surface drop off or soft shoulder.

Things Not To Do

- $\,\,\,^{\bigtriangledown}$ Do not attempt to steer back onto the road surface at speed or under acceleration.
- Do not make any sudden or drastic steering movements.
- Do not apply full braking.
- Do not attempt to accelerate over the surface drop off.

This is a sample guideline furnished to you by VFIS. Your organization should review this guideline and make the necessary modifications to meet your organization's needs. The intent of this guideline is to assist you in reducing exposure to the risk of injury, harm, or damage to personnel, property, and the general public. For additional information on this topic, contact your VFIS Risk Control Representative at (800) 233-1957.

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Intranet Website Resources:



NinthBrain can be accessed via the worldwide web at suite.ninthbrain.com

