

## Approved Courses by Virginia Office of EMS (VAOEMS)

Name	Course Length in Minutes	Description	Topic #	BLS#	ALS#
EMS Operations: Evidence-Based Medicine, Water Operations, and Training	60	EMS Operations covers a variety of different situations. In this collection of microlearning's you will learn about the common myths in the industry as well as evaluating treatment method in evidence based medicine, the pitfalls of water operations, how training counts and the importance of self-aid buddy aid.	47041	15 - OPERATIONS	20 - OPERATIONS
Dealing with Difficult People and Their Organizational Impact	60	Jerry Streich discusses how the fire service must handle personnel who cause unneeded mental stress in and out of the firehouse, including bullies, lawbreakers, and angry or violent members.	47042	15 - OPERATIONS	20 - OPERATIONS
Protocols for Pediatric Field Termination of Resuscitation	60	This course reviews the science of pediatric cardiac arrest and the development of criteria for futility in pediatric patients. Beyond that evidence base, there are a number of social and emotional considerations that must factor into a termination of resuscitation (TOR) protocol for pediatric patients. Review the findings from a series of focus groups engaging EMS professionals and affiliated stakeholders about pediatric TOR. Scene safety includes emotional as well as physical concerns. Post-mortem considerations require coordination with medical examiner and law enforcement. Using the Maryland protocol for pediatric termination of resuscitation as an example, Dr. Anders shares insights on pediatric TOR protocol development and the education of EMS professionals for implementation.	47043	15 - OPERATIONS	20 - OPERATIONS



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Refractory Cardiac Arrest: System-Wide Collaboration	60	In this panel discussion at the JEMS conference, you will learn how research and studies are leading to better methods for the treatment of refractory cardiac arrests. This discussion will also highlight what should be done from a protocol perspective using ECMO to save patient lives.	47044	12 - CARDIOVASC ULAR	17 - CARDIOVASCUL AR
Identifying Cardiac Emergencies Using 12-Lead ECG	60	When there's a life-threatening cardiac emergency, time is of the essence. 12-lead ECGs are useful diagnostic tools, but clinicians must be able to accurately and quickly identify life-threatening emergencies. This course will discuss ECG interpretation in the prehospital environment and give the learner practice interpreting sample ECGs.	47045	12 - CARDIOVASC ULAR	17 - CARDIOVASCUL AR
Pediatric Cardiac And Respiratory Arrest (ALS)	60	Many EMS clinicians may not regularly encounter pediatric patients, but it is necessary to be prepared to respond to any type of patient. This course will discuss pediatric respiratory arrest and cardiac arrest, including causes, prognosis, prevention, treatment, and transportation. This course will also examine poisoning and special considerations for traumatic cardiac arrest in pediatric patients.	47046		17 - CARDIOVASCUL AR
Pediatric Cardiac And Respiratory Arrest (BLS)	60	Many EMS clinicians may not regularly encounter pediatric patients, but it is necessary to be prepared to respond to any type of patient. This course will discuss pediatric respiratory arrest and cardiac arrest, including causes, prognosis, prevention, treatment, and transportation. This course will also examine poisoning and special considerations for traumatic cardiac arrest in pediatric patients.	47047	12 - CARDIOVASC ULAR	



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Moving Past FAST Exam: Prehospital Ultrasound	60	Ultrasound machines have been used in hospitals for years to allow medical providers to gain a better look inside their patients to find the source of issues, but why aren't they used more regularly in the field? In this course, we discuss how ultrasound actually works, what can be detected using an ultrasound, and how this can make a big impact on saving more lives.	47048		19 - MEDICAL
Planning for Mass Casualty and Trauma Triage	60	Unfortunately, mass casualty incidents have become more frequent. Having an effective EMS mass casualty incident (MCI) protocol has become crucial. Join Dr. Robert Lowe in his review of "Mass Casualty Trauma Triage - Paradigms and Pitfalls," published by the U.S. Department of Health and Human Services, to provide a framework to consider when planning MCI response.	47049	13 - TRAUMA	18 - TRAUMA
Invasive and NPPV in the Prehospital Setting	60	In the pre-hospital setting, providers need all tools at their disposal to ensure patient care. One of these tools that can be of great benefit is a mechanical ventilator. We will review the benefits of a mechanical ventilator versus manual resuscitative devices, how to choose the right machine for your department, and how to prevent lung injury, morbidity, and mortality typically caused by bag valve mask ventilation.	47050		16 - AIRWAY, RESPIRATION, VENTILATION



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Aided CPR Effects on Cardiac Arrest Outcomes	60	While unaided, manual CPR has been done for a long time and has saved many lives. Now, devices are available to increase survivability and benefit patients in need of this life-saving maneuver. Throughout this course, we will compare the results of device-aided CPR to manual unaided, as well as discuss the effects of CPR on the body.	47051	12 - CARDIOVASC ULAR	17 - CARDIOVASCUL AR
Advanced Airway Management in Cardiac Arrest	60	Many studies have been done comparing the results of different methods to use when responding to patients suffering from cardiac arrest and the best techniques to use for the highest rate of survival. Throughout this course, some of those studies will be compared to show the results and which techniques were found to be most successful in patient survival.	47052		16 - AIRWAY, RESPIRATION , VENTILATION
EVALI: e-Cigarettes and Vaping Lung Injuries	60	EVALI is e-cigarette and vaping-related acute lung injuries. EVALI is a recent illness that is affecting people who use vape products and e-cigarettes. It is often mistaken for other illnesses due to similar symptoms. This course provides symptoms, treatment options, and information on why EVALI is appearing now.	47053	14 - MEDICAL	19 - MEDICAL

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Sudden Unexplained Infant Death (SUID) (ALS)	60	Sudden Unexpected Infant Death (SUID) is among the most difficult cases a first responder can experience. Due to its nature, it is important to understand the steps in place to prepare for this scene, provide all care possible, and how to cope with all outcomes in the end. In this course, we will discuss the common etiologies, including the leading cause of infant death, SIDS (Sudden Infant Death Syndrome), and best practices for providers and leadership, including preparation, documentation, and support for the family and responders.	47054	19 - MEDICAL
Sudden Unexplained Infant Death (SUID) (BLS)	60	Sudden Unexpected Infant Death (SUID) is among the most difficult cases a first responder can experience. Due to its nature, it is important to understand the steps in place to prepare for this scene, provide all care possible, and how to cope with all outcomes in the end. In this course, we will discuss the common etiologies, including the leading cause of infant death, SIDS (Sudden Infant Death Syndrome), and best practices for providers and leadership, including preparation, documentation, and support for the family and responders.	47055	14 - MEDICAL
Explosive Safety and Trauma Management (BLS)	180	First responders must understand how to respond to post-blast incidents and what you will encounter. Serious infrastructure damage and injuries to casualties are the most concerning. EMS providers must understand how to utilize scene safety and situational awareness to avoid becoming victims ourselves. An understanding of blast injury mechanisms and treatment modalities is required by all first responders. This course will review commercial, military-grade, and home-made explosives (HMEs), as well as discuss explosive effects and the stages involved.	47056	13 - TRAUMA
Explosive Safety and Trauma Management (ALS)	180	First responders must understand how to respond to post-blast incidents and what you will encounter. Serious infrastructure damage and injuries to casualties are the most concerning. EMS providers must understand how to utilize scene safety and situational awareness to avoid becoming victims ourselves. An understanding of blast injury mechanisms and treatment modalities is required by all first responders. This course will review commercial, military-grade, and home-made explosives (HMEs), as well as discuss explosive effects and the stages involved.	47057	18 - TRAUMA

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Chokeholds, Ketamine, and Prone Positioning: The Legal and Medical Implications for EMS Practitioners	60	Recent societal events have focused on misconduct by law enforcement and improper use of chokeholds and other restraint mechanisms. But police officers are not the only ones who may act improperly, causing harm to others. It happens in EMS agencies, too! This dynamic and thought-provoking session will discuss the legal liability and the untoward medical effects of physical and chemical restraints. In this course, you'll hear from two legal and clinical experts as they address the challenging "dual role" of the EMS practitioner in ensuring both patient and bystander safety and at the same time remaining an ardent patient advocate when dealing with difficult patients or persons in custody.	47058	15 - OPERATIONS	20 - OPERATIONS
JEMS CEUs: Facial Weakness, Palsy, and Stroke	60	Facial weakness, palsy, and stroke are all serious medical conditions that can greatly affect an individual's quality of life. The ability to communicate, eat, and perform everyday tasks can all be compromised when facial muscles are weakened or paralyzed. It is critical that providers are up to date with signs, symptoms, and additional considerations and risk factors for patients with these conditions. This JEMS CEU course will examine how to differentiate between facial weakness caused by Bell's Palsy vs. Acute Stroke, diseases that mimic stroke, as well as stroke evaluation and triage.	47059	14 - MEDICAL	19 - MEDICAL
Becoming the Boss: A Guide for New Managers	60	As a first-time manager, you likely feel a mixture of excitement and apprehension about your new role. What changes should you expect? How can you build rapport and make a good first impression with your new team? And above all, how can you become an effective boss? This guide will help you transition seamlessly from employee to manager. This general education course provides foundational information on this subject, not specific to Fire and EMS operations.	47060		



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Refractory Cardiac Arrest: Partnering with Definitive Care	60	<p>Partnering with definitive care is an important element for EMS providers, especially when dealing with refractory cardiac arrest. By partnering appropriately, providers can improve the chances for a positive outcome for their patients. In this course, we'll hear from three perspectives - an emergency physician and prehospital medicine specialist, a professor of medicine and distinguished endowed chair of cardiovascular medicine, and a nurse manager. Through each perspective you'll hear about making transport determinations, emergency department priorities, the morality of data and reporting of PCI mortality, and ECMO in the modern ICU.</p>	47061	12 - CARDIOVASC ULAR	17 - CARDIOVASCUL AR
JEMS CEUs: Sudden Death and Cardiac Arrest	60	<p>EMS providers facing a patient who has had a sudden cessation of cardiac activity or sudden death have a difficult challenge. This JEMS CEU course will explore the most common causes of sudden unexpected death (arrhythmia, acute myocardial infarction, intracranial emergencies, pulmonary embolism, and aortic catastrophe). This course will also examine what EMS could potentially do better in treating patients with traumatic cardiac arrests, how to improve survival rates for cardiac arrest patients, and five deadly causes of chest pain other than myocardial infarction. Lastly, this course will discuss what prehospital providers should know about aortic dissection.</p>	47062		17 - CARDIOVASCUL AR
A Proactive Approach to Suicide Prevention	60	<p>Taking proactive action towards mental health is a proven means to combat the many mental health disorders that are common among first responders including depression, addiction, anxiety, and post-traumatic stress symptoms. Tragically, when not addressed, the end result of each of these can be suicide. This course will discuss methods to prevent suicide by learning its traceable causes. Rather than focusing on individual risk factors, this course will explain how creating an environment to encourage help-seeking behavior can alter an individual's trajectory from reaching suicide.</p>	47063	15 - OPERATIONS	20 - OPERATIONS
Crash Course in Toxicology: Five Deadly Overdoses to Know	60	<p>Overdoses are not an unusual reason for EMS calls. While the vast majority will do well with supportive care, there are certain overdoses with the potential for sudden deterioration and death if they are not managed aggressively. We will discuss five overdoses that every EMS provider should know and arm them with the knowledge to save these patients if they encounter them.</p>	47064		19 - MEDICAL



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JEMS CEUs: Behavioral Emergency Response Considerations	60	EMS providers are no stranger to calls regarding patients experiencing behavioral emergencies. When responding to these types of calls, it is important for the provider to be aware of the different types of incidents they may respond to, the treatment priorities, and restraint considerations that must be considered. This JEMS CEU course will discuss response to patients experiencing acute onset anxiety, depression, paranoid ideation, suicide, and others.	47065		19 - MEDICAL
Medical Preplanning for High Stake Events	60	Sporting events, concerts, fairs, political gatherings, and graduations are just a few events that can take place within your community. As EMS providers, what do you need to do to keep attendees safe and well? This course will discuss ways to partner with the event planner and why you need to have a written emergency medical plan for all high-stakes events within your community.	47066	15 - OPERATIONS	20 - OPERATIONS
Cricothyrotomy: Surgical Airway Realities	60	The pathway to mitigation of a true “can’t intubate, can’t oxygenate” situation is very direct—a cricothyrotomy. Many paramedics will never perform this procedure in their career; are YOU ready? The low-frequency, high-risk nature of this procedure mandates absolute knowledge of the anterior neck anatomy, frequent practice, and procedural confidence. When cricothyrotomy fails, it is often the result of an inability to properly locate the anatomic structures of the larynx. This course explores the realities of cricothyrotomy in a unique manner, using high-resolution cadaveric images, the anterior neck will be procedurally dissected and critical anatomic structures will be identified. A step-by-step approach—based on the latest evidence and best practices—will be followed to maximize your success in performing this time-sensitive, final option procedure.	47067		16 - AIRWAY, RESPIRATION, VENTILATION

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Anaphylaxis: Life-Threatening Emergencies	60	<p>What's the difference between anaphylactic and anaphylactoid, and do I need to care? What are the most important ALS medications for anaphylaxis after epinephrine? What the heck is Kounis syndrome? Why didn't they teach me this in class? The past 10 years have seen a dramatic increase in the number of cases of anaphylaxis across the United States. In response, the American College of Emergency Physicians and the World Allergy Organization have issued important updates on initial emergency treatment for patients suffering from anaphylaxis. While epinephrine remains the frontline drug for all levels of care, recent studies show that in-hospital and pre-hospital providers aren't giving it as often or as early as they should. This interactive case study and pub quiz style presentation answers these questions and many more with a focus on rapid differential of anaphylaxis and effective initial and secondary treatments to manage these immediately life-threatening emergencies.</p>	47068	14 - MEDICAL	19 - MEDICAL
Blast Injuries, Triage, and Facial Trauma	30	<p>Trauma is a part of the job and in this microlearning collection we will discuss blast injuries, treatment for crashing patients, how inconsistency in triage models may cause confusion in a mutual aid situation and well as other types of trauma emergencies and what to do.</p>	47069	13 - TRAUMA	18 - TRAUMA
Tackling Defensive and Distracted Driving	60	<p>In the United States, over 100 fatalities per day result from car crashes. Of those, 9% are the result of distracted driving. Defensive driving will help first responders and passengers get to and from emergencies with minimal incidents. Being aware of common driving distractions will help you to anticipate ways to avoid accidents caused by distractions. This course will discuss defensive driving techniques for large work vehicles like fire engines and ambulances, defensive driving techniques for personal vehicles, the dangers of distracted driving and how to mitigate it, and avoiding dangerous driving habits like tailgating and speeding.</p>	47070	15 - OPERATIONS	20 - OPERATIONS



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JEMS CEUs: Considerations for Geriatric Trauma Patient Care	60	<p>The US population is aging rapidly. What does this mean for EMS? There will be an increase in geriatric patient population, which means an increase in geriatric patient calls. There are many unique considerations related to geriatric patients, such as scene, movement, communication, and medication considerations. Geriatric patients also may have an increased rate of abuse and neglect; EMS must be vigilant for signs. This JEMS CEU course will also examine the complexities and considerations EMS must employ when evaluating geriatric trauma patients.</p>	47071	18 - TRAUMA	
Intellectual Disabilities and Their Impact on Assessment	60	<p>Individuals with intellectual disabilities (ID—previously known as mental retardation) have characteristics that can have a profoundly challenging impact on interactions with EMS providers during a medical or traumatic emergency. This course will discuss various characteristics of individuals with ID; suggestions for determining capacity and obtaining informed consent; ways to assess for pain; and suggestions to help facilitate assessment, treatment, and transport.</p>	47072	14 - MEDICAL	19 - MEDICAL
Patient Care: Acute Mental Illness or Suicide Ideation	60	<p>Millions of Americans experience mental illness each year. NAMI reports that 1 in 5 American adults will experience mental illness and 1 in 25 will experience serious mental illness. This course will discuss the current trends and prevalence rates of mental illnesses including anxiety, depression, and psychosis. It will also examine the most common mental illness symptoms and suicide ideation as they present in a pre-hospital setting. Also included are ways to assess and interact with patients presenting acute mental health challenges.</p>	47073	14 - MEDICAL	19 - MEDICAL



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Avoiding Social Media Landmines for EMS Providers	60	Social media has evolved into a regular part of how our society shares information, opinions, and perspectives. By some measures, it has become the primary method used many members of society to express themselves altogether. This course examines our tendency to express our stressors through social media and the implications it can have that are specific to EMS providers. We'll also examine best practices for both EMS department social media accounts as well as personal EMS provider accounts.	47074	15 - OPERATIONS	20 - OPERATIONS
Mental Health, Addiction, and Building Resiliency	60	As an EMS Professional, the role can cause stress, and this collection of microlearning courses will focus on how to identify and combat stress in a healthy way. It is also will talk through the stages of addiction and when to get help, then what you need to do to stay healthy and resilient when facing tragedy every day.	47075	15 - OPERATIONS	20 - OPERATIONS
JEMS CEUs: Fluid Resuscitation in Trauma Patients	60	Fluid resuscitation is a critical component in the management of hemorrhage and trauma. This JEMS CEU course will discuss key components of fluid resuscitation, including the use of normal saline and crystalloids in trauma, prehospital hemorrhage resuscitation, fluid management in hemorrhagic shock, and the use of whole blood. This course will also examine the use of warm saline and rapid infusion techniques for prehospital blood transfusions. During this course, learners will evaluate the pros and cons of normal saline, heated saline, prehospital packed red blood cells (pRBC) with plasma, whole blood, and crystalloid infusion.	47076		18 - TRAUMA



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Effectively Managing Conflict Resolution	60	The EMS way tends to be "That is how we have always done it." This most dangerous statement illustrates to not change anything, do what you are told, and be quiet. Are we still doing things this way and, if so, why? Our world is ever evolving, and things need to change, but that means working out our differences. Let's talk about the everyday conflict we encounter and make things more "fluid" to let this change take place.	47077	15 - OPERATIONS	20 - OPERATIONS
Conducting Evidence-Based Investigations	60	Your agency experienced an incident resulting in a sentinel event. Now what? Reacting quickly to the incident with a prescribed procedure and actions can demonstrate your commitment to safety and ensure the proper information is collected to fulfill an incident investigation's ultimate purpose, not assigning blame but the prevention of future incidents. Evidence-based investigations are the most necessary after accidents to determine how and why these accidents have occurred. In this course, Peter Dworsky discusses the need for evidence-based investigations, how to conduct an evidence-based investigation properly, and explains how to determine the causes of events, and what to do in the aftermath.	47078	15 - OPERATIONS	20 - OPERATIONS
Out-of-Hospital Pediatric Cardiac Arrest	60	Good outcomes are rare when a child goes into cardiac arrest in the prehospital setting. Most EMS professionals are trained to use PALS, but is there a better way to improve these outcomes? This session will demonstrate how Polk County Fire Rescue went from 0% to 45% survival in out-of-hospital pediatric cardiac arrest patients through calculated changes in care and patient preparation.	47079	12 - CARDIOVASC ULAR	17 - CARDIOVASCUL AR

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Allergic Reactions and Anaphylaxis (ALS)	60	<p>Allergic reactions, including their more severe form, anaphylaxis, represent an exaggerated or hypersensitive response following exposure to any of a number of triggers or allergens, like food, medications, or pollen. Allergic and anaphylactic reactions are typically but not always mediated by the immune system and are most notable for the fact that many other people would not experience any such reaction when exposed to the same triggers. Anaphylaxis represents the more severe and potentially life-threatening form of an allergic reaction. Your ability to recognize and treat allergic reactions can mean the difference between life and death for some patients. In this course, we'll discuss how the immune system may trigger allergic reactions, anaphylaxis recognition and treatment, as well as epinephrine administration.</p>	47080	19 - MEDICAL
Allergic Reactions and Anaphylaxis (BLS)	60	<p>Allergic reactions, including their more severe form, anaphylaxis, represent an exaggerated or hypersensitive response following exposure to any of a number of triggers or allergens, like food, medications, or pollen. Allergic and anaphylactic reactions are typically but not always mediated by the immune system and are most notable for the fact that many other people would not experience any such reaction when exposed to the same triggers. Anaphylaxis represents the more severe and potentially life-threatening form of an allergic reaction. Your ability to recognize and treat allergic reactions can mean the difference between life and death for some patients. In this course, we'll discuss how the immune system may trigger allergic reactions, anaphylaxis recognition and treatment, as well as epinephrine administration.</p>	47081	14 - MEDICAL
JEMS CEUs: End-Tidal CO2 and Capnography	60	<p>The importance of end-tidal CO<sub>2</sub> (EtCO<sub>2</sub>) and capnography cannot be overstated for prehospital providers. This JEMS CEU course discusses the importance of EtCO<sub>2</sub> and how to use PQRST method for interpretation using clinical applications and examples. You'll also delve into using EtCO<sub>2</sub> to identify states of shock and inform pain management care. This course will also discuss capnography in EMS, including interpreting waveforms and using interpretations to inform your treatment for intubated and non-intubated patients. Lastly, you'll learn the pros and cons of using tools (such as colorimetric devices, capnometry, and capnography) to confirm proper airway placement and the risks for</p>	47082	16 - AIRWAY, RESPIRATION, VENTILATION



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Blood Products for Managing Hemorrhage and Shock Patients	30	<p>The importance of end-tidal CO<sub>2</sub> (EtCO<sub>2</sub>) and capnography cannot be overstated for prehospital providers. This JEMS CEU course discusses the importance of EtCO<sub>2</sub> and how to use PQRST method for interpretation using clinical applications and examples. You'll also delve into using EtCO<sub>2</sub> to identify states of shock and inform pain management care. This course will also discuss capnography in EMS, including interpreting waveforms and using interpretations to inform your treatment for intubated and non-intubated patients. Lastly, you'll learn the pros and cons of using tools (such as colorimetric devices, capnometry, and capnography) to confirm proper airway placement and the risks for not using them.</p>	47083	18 - TRAUMA
Trench Rescue: Excavation, Trenching, and Soil Mechanics	60	<p>Responding to a trench rescue requires quick and accurate action. Understanding how to handle the situation best and not make it worse is imperative. After years without much information on the topics of trench collapse and shoring unstable dynamic soil conditions, an innovative method has been designed specifically for firefighters to rapidly and accurately estimate worst-case soil forces associated with these incidents. This course addresses OSHA CFR 29 Subpart P; OSHA CFR 29 Part 1926 Subpart P.</p>	47084	15 - OPERATIONS      20 - OPERATIONS
Avoiding the Dangers of Overventilation	60	<p>For decades, rapid sequence intubation (RSI) has been the most-used intervention for select respiratory care, especially in acute and critical prehospital settings. This course will take a look at a more effective way to care for patients who require manual breathing techniques that avoid hyperventilation and improve overall patient outcomes.</p>	47085	11 - AIRWAY, RESPIRATION, VENTILATION      16 - AIRWAY, RESPIRATION, VENTILATION

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Creating Effective Training Simulations	60	Simulation training is one of the most effective tools to teach learners new skills. It uses kinesthetic training to emulate real-life situations so that in the event EMS professionals encounter them, they are prepared. However, the simulation alone is not what makes this type of training so effective. This course explains the systems surrounding simulation and scenario training and way to enhance training to produce the best results for learners.	47086		
How Prehospital Stroke Care is Changing	60	Strokes have a time critical diagnosis which makes practicing the proper prehospital care important to ensure patients are receiving life saving care. In this course, Dr. Eric Cortez discusses what a stroke is, what steps to take to identify a stroke, and how to prepare while transporting the patient to a hospital. By making sure a hospital is prepared to take on a stroke patient, EMS will be able to help shave off time from the occurrence to the time the patients are able to receive treatment. Dr. Cortez also discusses the types of strokes, their symptoms, and their various treatments.	47087	12 - CARDIOVASC ULAR	17 - CARDIOVASCUL AR
Measuring Cerebral Perfusion During CPR	60	When we think of Cardiac Arrests we think about an older population with comorbidities. However, there is evidence these types of incidents can happen to anyone. This course highlights what skills you can use to improve survival rates as an EMT and Paramedic.	47088	12 - CARDIOVASC ULAR	17 - CARDIOVASCUL AR
EMS in Civil Unrest and SWAT Operations	60	In Today's environments one never knows what they may be walking into as an EMT or Paramedic and this course is a collection of microlearning courses that focus on EMS in Civil Unrest situations and how SWAT Operations affects tactical medics.	47089	15 - OPERATIONS	20 - OPERATIONS



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Improving Assessment and Pediatric Care	30	This course is a collection of microlearning courses that focus on assessments with pediatric patients. In the courses there are industry leaders that will explain the difficulties in accessing pediatric patients as well as how to gain medical history from parents and guardians that matter. Also it will focus on how to provide high quality care for pediatric patients.	47090	14 - MEDICAL	19 - MEDICAL
Transgender Patient Assessment and Care	60	It's important for first responders to be culturally competent, especially when dealing with transgender individuals. About 1.4 million people in the US are transgender, and they often face harmful interactions with medical providers due to stigma and lack of knowledge. In this Podcast, EMT Taylor Sprecher shares his story and emphasizes the need for building trust during patient interviews to reduce the adverse effects of medical treatment. Taylor also shares his personal transition journey.	47091	15 - OPERATIONS	20 - OPERATIONS
Revolutionizing Cardiac Arrest Survival	60	Cardiac arrest leads to hundreds of thousands of deaths a year. Due to this fact, those falling victim to this life-threatening incident must be assisted as quickly as possible. Research has shown what can be done by bystanders on scene before first responders arrive, what first responders can do when they arrive, and what can be done in the hospital to improve the survival rate of a cardiac arrest patient. The bottom line is time is the enemy, and we need to work against it to reach these patients as quickly as possible.	47092	12 - CARDIOVASCULAR	17 - CARDIOVASCULAR

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Improving Pediatric Resuscitation Rates	60	Polk County (FL) Fire Rescue redesigned its pediatric and neonatal resuscitation practices and went from 0% to an amazing 35% survival-to-discharge. This course will detail how they achieved this great success and illustrate why post-cardiac arrest care should focus on the maintenance of adequate oxygen delivery, provision of support for post-cardiac arrest myocardial dysfunction, avoidance of secondary neurological injury, and monitoring for and treatment of post-arrest seizures. It will illustrate why it's important to determine the cause of arrest because of the possibility of family genetic diseases and demonstrate optimal strategies for survival in pediatric arrest.	47093		17 - CARDIOVASCUL AR
Burn Care for Patients and Firefighters	60	EMS departments frequently align with fire departments, creating a greater need for burn care training and considerations as a common dispatched emergency. The prepared responder will be able to manage treatment for pediatric burn victims, firefighters, and the general population – each with their own accompanying components that make up comprehensive pre-hospital management.	47094		18 - TRAUMA
Technology and Quality Improvement in Cardiac Arrests	60	New technology and quality improvements have made huge strides in cardiac arrest outcomes within the Los Angeles Fire Department. In this course, Dr. Clayton Kazan and Nicole Steeneken, M.Ed. and will describe the technologies, including metronomes and voice prompts, that were implemented and the results they achieved.	47095		17 - CARDIOVASCUL AR
Initial Management of Pediatric Arrest	60	This course is a real-life look at "running a peds code." We will begin with a review of pediatric arrest physiology. This course will stress appropriate BLS management, followed by guideline-driven basic and advanced life support measures. Using live footage and emphasizing realistic treatment of the arrested child, the goal is to help reduce anxiety in the participants and help them feel more comfortable with performing skills while fostering understanding of expected outcomes in the pediatric code situation.	47096	12 - CARDIOVASC ULAR	17 - CARDIOVASCUL AR



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Scene Safety and Situational Awareness	60	Verifying that a scene is safe is drilled into every EMT and paramedic from day one, but the reality is that no scene is ever 100% danger-free. There is danger in assuming that a scene is and will remain safe. In this course, we will explore ways to make the scene as safe as possible.	47097	15 - OPERATIONS	20 - OPERATIONS
Epinephrine, Glucometers, and Naloxone	60	Anaphylaxis, diabetic emergencies, and opioid overdoses present potential life-threatening emergencies for patients. When these types of calls come, there is often little time to act. EMS providers, whether ALS or BLS, must be prepared to intervene to save the lives of their patients. In this course, we'll explore the use of naloxone, epinephrine auto-injectors, and glucometers for BLS providers in EMS.	47098	14 - MEDICAL	19 - MEDICAL
Optimization for Successful Intubation	45	As ALS providers, we can feel the pressure to intervene rapidly when indicated for patients. However, we have a responsibility as providers to ensure we are providing the appropriate level of care and doing it correctly. In this training collection, Jeremy Williams discusses best practices for preparing for intubation, induction agents, Rapid sequence intubation (RSI), drug-assisted airway management (DAAM), and delayed sequence intubation (DSI).	47099		16 - AIRWAY, RESPIRATION, VENTILATION
Trauma, Helmets, and Airway Management	60	Helmeted patients pose different challenges to EMS providers when treating their injuries after an accident. In this course, we will review three different types of helmets worn and how they impact airway management, how energy will affect the patient's injuries, and four common challenges EMS providers face when working with helmeted patients, such as patient access, assessment, airway management, and communication with the patient.	47100		18 - TRAUMA



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HIPAA for Managers of First Responders	90	HIPAA provides protections to ensure that patient identities and their protected health information remain confidential. It's important that all EMS providers take steps and caution to prevent any violations of HIPAA. This course will act as a reminder to ensure providers take the necessary precautions to avoid any information breaches.	47101		
Building Teams That Promote Growth and Leadership	60	Developing as a leader take effort and follow through. This collection of microlearning courses will give you advice on what a successful career looks like and how to obtain formal education, how to be and be a part of a mentoring program as will have how recruiting has changed in the industry.	47102		
Pulmonary Embolism: The Silent Killer	60	Pulmonary emboli are the cause of more deaths each year than car accidents, breast cancer, and AIDS combined but are often overlooked in prehospital settings. Why? Half of the people who have a pulmonary embolism have no specified symptoms or symptoms that present as completely different illnesses. In this session, Dr. Paul Banerjee explains the signs and symptoms of a pulmonary embolism and best practices in prehospital treatment.	47103	12 - CARDIOVASC ULAR	17 - CARDIOVASCUL AR

## Approved Courses by Virginia Office of EMS (VAOEMS)

Autism Awareness for First Responders	150	<p>Individuals with autism are seven times more likely to interact with first responders than the average citizen. To properly respond to calls with individuals who have autism, first responders must understand what autism is, best practices, and associated dangers. This course will discuss specific hazards unique to fire and EMS and recommend best practices to protect those with autism, their loved ones, and first responders.</p>	47104	14 - MEDICAL	19 - MEDICAL
High-Consequence Infectious Disease Awareness	60	<p>EMS providers of all types may be exposed to patients with high-consequence communicable diseases. The course aims to increase awareness about standard and transmission-based infection control practices and considers current high-consequence infectious diseases like COVID-19, MERS (Middle Eastern Respiratory Syndrome), and novel influenza viruses (e.g., H7N9). By increasing awareness about timely and relevant infectious disease threats and reviewing infection control practices and management strategies, healthcare workers can better protect themselves in the workplace. This webinar was presented during the COVID-19 Pandemic and contains historical information regarding the COVID-19 pandemic with still valuable information about high-consequence infectious diseases.</p>	47105	14 - MEDICAL	19 - MEDICAL
EMS During Civil Disobedience Events	60	<p>Events involving demonstrations and protests disrupt normal EMS operations and require a coordinated medical response with properly trained and oriented personnel who can move on a moment's notice and in accordance with a special command and control structure. Planning and capabilities to support Civil Disobedience Units and other law enforcement assets during these special events require a high level of coordination between all public safety entities and the medical system. Traditional EMS training does not account for operating in these dangerous and fast-changing environments and is not generally adequate to support these challenging situations. This course will address these differences and how EMS can support the needs of both law enforcement and the entire community during civil disturbances and unrest.</p>	47106	15 - OPERATIONS	20 - OPERATIONS

## Approved Courses by Virginia Office of EMS (VAOEMS)

Influenza and Provider Hygiene (ALS)	60	Influenza, or as it is more commonly known as the flu, has plagued mankind for centuries. Like many viruses, the severity of the symptoms of this virus varies on the patient's medical history and other personal details. Modern medicine and technologies have helped improve how this virus is treated with vaccines and medicines taken to lessen the severity of symptoms. Sharing some similar symptoms and side effects with COVID-19 and the common cold, influenza can be spread from one person to the next. This course will discuss ways to help treat patients with influenza or multiple infectious diseases simultaneously, as well as ways to keep you healthy and safe.	47107	19 - MEDICAL
Influenza and Provider Hygiene (BLS)	60	Influenza, or as it is more commonly known as the flu, has plagued mankind for centuries. Like many viruses, the severity of the symptoms of this virus varies on the patient's medical history and other personal details. Modern medicine and technologies have helped improve how this virus is treated with vaccines and medicines taken to lessen the severity of symptoms. Sharing some similar symptoms and side effects with COVID-19 and the common cold, influenza can be spread from one person to the next. This course will discuss ways to help treat patients with influenza or multiple infectious diseases simultaneously, as well as ways to keep you healthy and safe.	47108	14 - MEDICAL
Asthma and Shortness of Breath (ALS)	60	About 1 in 12 people in the United States have asthma, contributing to frequent calls to dispatch EMS for shortness of breath. In this course, we will learn about the best response strategies for handling shortness of breath and asthma emergency calls. We'll review how to assess patients and distinguish between asthmatic patients and other respiratory issues. We'll review the pathophysiology of asthma. We'll also go into more detail about management options for asthma, as there are several different treatment options depending on the severity of the patient's condition.	47109	19 - MEDICAL

## Approved Courses by Virginia Office of EMS (VAOEMS)

Asthma and Shortness of Breath (BLS)	60	<p>About 1 in 12 people in the United States have asthma, contributing to frequent calls to dispatch EMS for shortness of breath. In this course, we will learn about the best response strategies for handling shortness of breath and asthma emergency calls. We'll review how to assess patients and distinguish between asthmatic patients and other respiratory issues. We'll review the pathophysiology of asthma. We'll also go into more detail about management options for asthma, as there are several different treatment options depending on the severity of the patient's condition.</p>	47110	14 - MEDICAL
Infectious and Communicable Diseases	60	<p>Hazards are present in many aspects of EMS. When you're focusing on the patient, it can be difficult to think of some of the smaller or unseen dangers to first responders. This course will discuss what EMS providers can do to identify symptoms and protect themselves from infectious and communicable diseases such as hepatitis, HIV, tuberculosis, influenza, norovirus, and coronaviruses.</p>	47111	14 - MEDICAL 19 - MEDICAL
12 Recipes for Success in Leadership	60	<p>To be a good leader, you must be willing to have a positive attitude, maintain your credibility, and be humble. In this course, Paul Combs invites you to learn the 12 recipes for success in a leadership role. These recipes are standards the foundation for success. As Lieutenant (ret.) Paul Combs walks you through the recipes for success, he shares key advices, stories, and his cartoons proving that if you have a passion for the fire service and follow the recipe for success, you will find success as a leader.</p>	47112	



## Approved Courses by Virginia Office of EMS (VAOEMS)

JEMS CEUs: Caring for Patients with Dementia or Alzheimer's	60	Caring for patients with dementia or Alzheimer's presents unique challenges for EMS providers. This JEMS CEUs course provides several perspectives on different components of dementia patients, including the PAINAD scale, considerations for dementia patients, and dealing with challenging patients and family.	47113	14 - MEDICAL	19 - MEDICAL
Pediatric Management: HandTevy, Broselow, PALS	60	Emergency management of sick kids is challenging to say the least! It's among high-risk, low-frequency calls that challenge even the most seasoned providers. It doesn't have to be that way! This program takes a comprehensive look at ways to overcome pitfalls associated with high-stress pediatric calls. Compare and contrast the HandTevy Pediatric Resuscitation System with that of Broselow and PALS Algorithms, Pit-Crew Resuscitation methodology, and High Performance CPR.	47114		17 - CARDIOVASCUL AR
CPAP and Capnography: A Dynamic Duo	60	Continuous Positive Airway Pressure or CPAP is a BLS and ALS tools that can save lives, reduce hospitalization times, and provide better patient management in the field. This presentation provides a history of CPAP, overview of patient selection criteria, standards of care, assessment, application of CPAP in the field and transition of care to the Emergency Department. Disposable CPAP devices and use of capnography with the application and titration of CPAP promise to increase utilization and improve patient outcomes.	47115	11 - AIRWAY, RESPIRATION , VENTILATION	16 - AIRWAY, RESPIRATION , VENTILATION
Ambulance Operations: Driver Safety	60	As an emergency medical technician or paramedic, you are responsible for treating patients on the scene to your scope of practice and getting patients to the hospital quickly and safely. This can be difficult, especially when driving in unfamiliar territory or dealing with traffic congestion. This course will discuss critical elements of driving emergency response vehicles safely and effectively.	47116	15 - OPERATIONS	20 - OPERATIONS



## Approved Courses by Virginia Office of EMS (VAOEMS)

Community Paramedicine and Children	60	<p>Mobile Integrated Health/Community Paramedicine programs continue to lament facing challenges when it comes to the measurement of their programs' efficacy, and as a result, their ability to get paid for their work. But one of the pervasive questions in recent years – especially since the COVID-19 pandemic challenged the economics of both Mobile Medicine and hospital-based medicine – is whether the areas of traditional investment are those that generate the greatest return along clinical, operational and financial lines. What, and who, are being overlooked? This course features a discussion about artificial intelligence in Mobile Medicine, we will argue that patients at the beginning and the end of their lives have been largely left out of the conversation (hence why aligning MIH/CP with hospice is still a rare approach). Focusing MIH/CP efforts on children, however, can be especially effective – and we think every program should do so – because caring for kids cuts through the noise and the politics. As a result, it commands resources in service of children with special health needs, and those who care for them.</p>	47117	15 - OPERATIONS	20 - OPERATIONS
Defibrillator and Monitor Functions	30	<p>Irregular heartbeats or arrhythmias are dangerous, life-threatening events. There are different methods to help revive a patient depending on the heart event they are experiencing. EMS providers will need to be able to observe the patient's heart rhythm and use monitors to do so. EMS systems utilize combination monitor/defibrillators in the field to both track the patient's cardiac output and provide defibrillation if needed. This course will review common monitor functions and demonstrate how to perform transcutaneous pacing, synchronized cardioversion, and placing a 12-lead.</p>	47118	17 - CARDIOVASCUL AR	
Resolving Conflict in the Workplace	60	<p>Resolving conflict between employees can be difficult. This general education course explains the common causes of conflict. It also gives you six full-proof steps to mediate conflict and how to deal with angry or frustrated employees.</p>	47119	15 - OPERATIONS	20 - OPERATIONS



## Approved Courses by Virginia Office of EMS (VAOEMS)

Protection Against Phishing Attacks	60	<p>Reports of online scams and cyberattacks are on the rise, but most people don't heed them until it's too late. So, what steps can you take right away to avoid becoming another cautionary tale? One critical security measure is protecting yourself against phishing—when an attacker pretends to be a trusted contact or organization to gain access to personal information. This general education course provides foundational information on this subject, not specific to Fire and EMS operations.</p>	47120		
Building Integrity in the Workplace	30	<p>What does it mean to have integrity? What role does it play in career advancement and job satisfaction? These questions make up the heart of this course on workplace integrity. As we'll discuss, there are benefits and challenges of maintaining integrity when making difficult workplace decisions. Through real-world examples, you'll see the three forms of workplace integrity in action. You'll also uncover four steps to align your values and actions to become someone that others trust, admire, and respect.</p>	47121		
Bloodborne and Airborne Pathogens for First Responders	60	<p>As a first responder, you may encounter varying types of bloodborne and airborne pathogens. It is necessary to be prepared for these circumstances so that you are better equipped to protect yourself and others and help to stop the spread of potentially dangerous pathogens. This course will discuss bloodborne and airborne pathogens, including the use of personal protective equipment and controlling exposure.</p>	47122	14 - MEDICAL	19 - MEDICAL
JEMS CEUs: Neonate and Infant Care Considerations	60	<p>Calls involving children can be intimidating for even the most seasoned EMS provider; newborn and infant calls can feel especially daunting. This JEMS CEU course will consider several elements of neonate and infant care, including assessing apparent life-threatening events (ALTE), transport determinations, actions for SIDS patients, resuscitation considerations, CPR, pediatric airway and ventilation considerations.</p>	47123		19 - MEDICAL



## Approved Courses by Virginia Office of EMS (VAOEMS)

Obstetric Emergencies: Birth and Complications	30	Out-of-hospital childbirths can be considered a complex delivery. In this course, expert Kenneth Thompson describes the complexities that arise when childbirth doesn't go as planned. Here, you will learn how to have a safe out-of-hospital delivery, the complications you may face, and what can be done to help in those circumstances.	47124	14 - MEDICAL	19 - MEDICAL
Pharmacology and Toxicology in EMS	30	As an EMS professional one area that is often not discussed but is an important part of your role is pharmacology and toxicology. We will explore in this collection of microlearning's current trends, exposure to fentanyl and other toxic substances, medication errors, and auto injectors.	47125	14 - MEDICAL	19 - MEDICAL
Preventing Slips, Trips, and Falls	60	The latest data shows that 22% of all firefighter injuries and 10% of all EMS provider injuries are due to slips, trips, and falls. These types of injuries are largely preventable if appropriate precautions are taken. This course will cover the basic preventative methods for avoiding this kind of injury in the workplace or on the fireground. Topics covered include the most common circumstances for major falls, preventative measures to avoid slips, trips, and falls, and the correct usage of workplace equipment to ensure environmental safety. This course will address OSHA guidelines, including 29 CFR 1910 subpart D.	47126	15 - OPERATIONS	20 - OPERATIONS
Managing Patients with Atrial Fibrillation (A-fib) (ALS)	60	Atrial fibrillation is the most common cardiac dysrhythmia encountered by both EMS personnel. However, many providers lack an understanding of the condition and appropriate management. In this course, providers will gain a better understanding of the etiology and pathophysiology of atrial fibrillation, as well as the acute and long-term risks that patients with atrial fibrillation face. Participants will understand the treatment of both hemodynamically stable and unstable patients presenting with atrial fibrillation.	47127		17 - CARDIOVASCULAR
Management of Acute Burn Injuries	60	This course will examine current trends in burn care for both pediatric and adult patients. We will discuss triage and stabilization, airway and inhalation injury, burn shock and edema, escharotomy, calculating burn size, types of burns, and clinical studies.	47128	13 - TRAUMA	18 - TRAUMA



## Approved Courses by Virginia Office of EMS (VAOEMS)

Cleaning Ambulances and Equipment	60	Keeping an ambulance and the equipment inside clean is vital to protecting the crew and the patients. In this course, Katherine West discusses the importance of keeping ambulances and their equipment clean. We learn about the importance of cleaning, high touch areas, new cleaning products and technologies, as well as, following CDC and OSHA guidelines.	47129		
Treating Pediatric Patients (ALS)	60	Responding to an emergency call is stressful. Now add in the fact that the patient who needs care is a child, or infant. There are more factors to consider, such as developmental milestones, weight-based medication dosages, and different methods of treating a pediatric patient. You have to adapt your mindset and skillset to go in knowing some treatment methods will need to be changed because it is a pediatric patient. As we'll discuss in this course, knowing the signs and symptoms and different treatment methods is key to answering a pediatric emergency call.	47130		19 - MEDICAL
Treating Pediatric Patients (BLS)	60	Responding to an emergency call is stressful. Now add in the fact that the patient who needs care is a child, or infant. There are more factors to consider, such as developmental milestones, weight-based medication dosages, and different methods of treating a pediatric patient. You have to adapt your mindset and skillset to go in knowing some treatment methods will need to be changed because it is a pediatric patient. As we'll discuss in this course, knowing the signs and symptoms and different treatment methods is key to answering a pediatric emergency call.	47131	14 - MEDICAL	
Emergency Action Plans and Egress	90	As first responders, you face new challenges and hazards that test your skills, knowledge, and courage daily. This course will give you critical information and strategies to navigate these dangers effectively, focusing on essential OSHA standards and emergency action plans. Understanding and applying these guidelines will enhance your ability to protect yourself, your team, and those you serve in every emergency scenario.	47132	15 - OPERATIONS	20 - OPERATIONS
Considerations for Common Vehicle Accident Injuries	30	Motor vehicle accidents are some of the most common EMS calls throughout the country. When responding, there are many factors you must keep in mind, while quickly assessing the situation. This training collection will examine priorities and considerations for patient care during extrication, as well as some common trauma injuries you may encounter (such as TBI, crush injuries, and shock). Rommie Duckworth and Christopher McLaughlin will discuss how to care for these patients and considerations for coordinating delivery of care during extrication.	47133	13 - TRAUMA	18 - TRAUMA



## Approved Courses by Virginia Office of EMS (VAOEMS)

Cardiac Emergencies in the Pre-Hospital Setting	60	This course will discuss treating cardiac emergencies in the pre-hospital environment. Topics discussed include predicting patient flow, the cardiovascular system, pit crew CPR, cardiac arrest strategies, cardiac arrest drugs, dysrhythmia, ACLS, what to do if the rhythm is too slow or too fast, and other cardio vascular diseases.	47134	12 - CARDIOVASC ULAR	17 - CARDIOVASCUL AR
Respecting and Caring for the Elderly Community	30	This podcast explores the experiences of EMS first responders from United Hatzalah, focusing on providing compassionate care to the elderly and discussing community programs that support isolated seniors. This episode features a discussion about the geriatric population, highlighting the extra care required when responding to their calls and the importance of treating elderly patients with respect and dignity. The hosts, Raphael Poch and Dov Maisel, share insights on providing compassionate care, addressing loneliness, and developing community programs like the "Giving Respect" initiative, which pairs volunteers with isolated seniors to ensure their well-being and prevent medical emergencies.	47135	14 - MEDICAL	19 - MEDICAL
Manual or Mechanical Ventilation	60	Airway management and ventilation are some of the most important yet challenging situations faced by EMS. What is the best way to ventilate? What are the advantages of manual and mechanical ventilation? Dr. Gräsner works as an emergency physician for Medical Mass Casualty Incidents in different EMS and the helicopter emergency medical service in Germany. In this course, Dr. Gräsner will discuss how a patient can benefit from mechanical ventilation and talk about different ways to monitor an airway.	47136	11 - AIRWAY, RESPIRATION , VENTILATION	16 - AIRWAY, RESPIRATION , VENTILATION

## Approved Courses by Virginia Office of EMS (VAOEMS)

Cannabinoid Hyperemesis Syndrome	60	<p>Regular medical and recreational use of cannabis is on the rise among all age groups. In most cases, this is associated with few side effects, but some regular users experience a wildly paradoxical reaction. While cannabis will normally suppress nausea and pain and stimulate appetite, weekly cannabis use can sometimes produce severe cramping, abdominal pain, vomiting, and nausea known as cannabinoid hyperemesis syndrome (CHS). In this course, we explore the pathophysiology of CHS, discuss presentations that EMS may encounter, and review the current diagnostic and treatment criteria. Current estimates are that cannabinoid hyperemesis syndrome affects potentially 2.7 million people in the United States annually, with significant increases in states with legalization. With complications of CHS including kidney failure, electrolyte imbalance, and skin burns on patients seeking self-treatment, can EMS providers afford to be unprepared?</p>	47137	14 - MEDICAL	19 - MEDICAL
Pre-Hospital Fluid Resuscitation	60	<p>Ensuring patients receive pre-hospital fluids can mean reduced mortality rates and better patient care. One of the main incidents first responders may respond to that would require administering fluids would be someone experiencing shock. This course explains the different kinds of shock, how to treat shock, and fluid resuscitation response.</p>	47138		18 - TRAUMA
Violent Encounters in Healthcare	60	<p>In this podcast course, EMS Handoff Podcast, with Hosts Bradley Dean and David Blevins meet with the founder of Dt4EMS, Jason Brooks, to talk about the violence toward healthcare providers. There is a lot of information about the encounters and how to preemptively identify different threats, and ways to evade if needed.</p>	47139	15 - OPERATIONS	20 - OPERATIONS

## Approved Courses by Virginia Office of EMS (VAOEMS)

Identifying and Responding to Human Trafficking	60	<p>Recent research found that there are an estimated 313,000 victims of human trafficking in Texas alone. National estimates suggest that 87.8% of victims of human trafficking come in contact with healthcare providers. However, most tools to identify victims of human trafficking are designed for social service and clinical environments. Many of these tools require more time than feasible in an EMS setting due to the nature of the questions. Others require a strong rapport or previously developed client trust before the measure can be administered. None of the available instruments are appropriate for use in the EMS setting. This course will present a critical analysis of the current tools available, the latest findings from mixed-methods research on the development and validation of a tool for use by medical first responders, and a protocol to assist victims of human trafficking into the appropriate networks of care.</p>	47140	15 - OPERATIONS	20 - OPERATIONS
Acute Carbon Monoxide Poisoning	60	<p>Carbon monoxide (CO) is colorless, odorless, and tasteless, making it difficult to identify without the use of a detector. It is created during an incomplete combustion of organic materials, and can be released from many different sources, like car exhaust, burning of natural gases, and forest fires. Patients suffering from acute carbon monoxide poisoning can have immediate and long-lasting effects from exposure. In this course we will review actions EMS providers should take when working with patients suffering from CO poisoning, the delayed injuries that may be caused, and what EMS providers should look for when diagnosing.</p>	47141	14 - MEDICAL	19 - MEDICAL
Pediatric Toxic Ingestion (ALS)	120	<p>Poisoning or toxicological emergencies remain a significant but preventable cause of pediatric injury. With the increased availability of prescription medications along with a multitude of over-the-counter (OTC) medications, pediatric toxic exposures are more frequent than in any other population age group. Although many of the principles and concepts that apply in adult toxicology share similarities to pediatrics, pediatric toxicological emergencies are often extensive and multifaceted. This course introduces the concepts of pediatric toxicological emergencies, beginning with the basic approach to the poisoned pediatric patient, followed by specific potentially toxic natural or synthetic substances and their associated toxidromes, as well as patient treatment and management.</p>	47142	19 - MEDICAL	

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Pediatric Toxic Ingestion (BLS)	120	Poisoning or toxicological emergencies remain a significant but preventable cause of pediatric injury. With the increased availability of prescription medications along with a multitude of over-the-counter (OTC) medications, pediatric toxic exposures are more frequent than in any other population age group. Although many of the principles and concepts that apply in adult toxicology share similarities to pediatrics, pediatric toxicological emergencies are often extensive and multifaceted. This course introduces the concepts of pediatric toxicological emergencies, beginning with the basic approach to the poisoned pediatric patient, followed by specific potentially toxic natural or synthetic substances and their associated toxidromes, as well as patient treatment and management.	47143	14 - MEDICAL	
10 Things You Should Know About Pulse Oximetry	60	Responding to calls from patients who require accurate pulse oximetry readings can happen often. It's important to be prepared to do so and understand different aspects of pulse oximetry. For example, reasons you may get an erroneous reading and different parts of the body to use to get a reading from. In this course, we will review these topics and more to create a list of ten things EMS providers should know about pulse oximetry.	47144	11 - AIRWAY, RESPIRATION, VENTILATION	16 - AIRWAY, RESPIRATION, VENTILATION
EMS Research and How it Affects Your Practice	60	EMS research and evidence-based guidelines guide and inform how we treat our patients every day. In this course, the panel will present several recent scientific papers and discuss their findings. The panel will then discuss the relevance to EMS providers and how literature may affect our practice.	47145	15 - OPERATIONS	20 - OPERATIONS
The Ketamine Challenge: Pros and Cons for EMS	60	EMS use of ketamine is relatively new. Evidence suggests it is both safe and effective for Excited Delirium Syndrome, procedural sedation, and analgesia. This potent, general anesthetic agent also creates unique challenges heretofore unknown in EMS. This course will review the background of EMS ketamine, use in multiple clinical settings, the ketamine dosing spectrum, special considerations (e.g., lookalike packaging and the need for dilution), and the recognition and management of potential complications.	47146		19 - MEDICAL

## Approved Courses by Virginia Office of EMS (VAOEMS)

Supraglottic Airway Management	60	Supraglottic airways have evolved beyond the combitube with more and more devices available in the field today. They can be very powerful tools in the management of airways both in the field and the hospital in well trained hands. With so many available devices it can be a task for an agency to decide which device to use. This course will explore the role that supraglottic airways play in prehospital airway management as well as discuss the commonalities between devices as well as the differences. Tips and tricks for better supraglottic airway management will be discussed.	47147	16 - AIRWAY, RESPIRATION, VENTILATION
Tackling the Impossible Airway	60	There are “difficult airways” and there are seemingly “impossible airways.” This case-based class will use vivid examples (trauma, angioedema, etc.) of seemingly impossible airways and discuss strategies to overcome the profound challenges these situations pose to the prehospital provider.	47148	16 - AIRWAY, RESPIRATION, VENTILATION
Workplace Communication Basics	60	What do most great employees have in common? Stellar communication skills. In this course, you'll learn why having excellent communication skills is so important in the workplace, and how you can improve yours.	47149	
Recognizing and Responding to Human Trafficking	90	The majority of human trafficking victims will be seen by a healthcare provider while being trafficked. 81% of those will be seen in a hospital. EMS providers have a unique opportunity to build relationships of trust with human trafficking victims, interview them prior to their destination, and report to the proper authorities – effectively intervening on their behalf when possible. By being trained to identify signs of labor and sex trafficking, recognize common situations and vulnerable populations, and then choose appropriate professional responses, EMS providers can be effective agents of change to protect patients against human trafficking.	47150	15 - OPERATIONS 20 - OPERATIONS



## Approved Courses by Virginia Office of EMS (VAOEMS)

E-CPR, VADs, and ECMO: Oh My!	60	<p>In this webinar, learners will be introduced to extracorporeal membrane oxygenation (ECMO) and its broad applications. It is a well-established therapy, and its use is becoming more widespread. Most tertiary facilities have ECMO programs and capability. EMS personnel could be called on to transport these critically ill patients, and this lecture provides a broad overview. ECMO has been used in the field as a resuscitative adjunct. In the future, it is possible that some centers in the United States may consider this option. In this course, Dr. Misselbeck also provides a provocative look at the potential of this emerging technology for the future.</p>	47151	17 - CARDIOVASCUL AR
Business Writing Fundamentals	60	<p>Many of us took courses on writing in elementary school or even high school, however, there are specific requirements for business writing. In this general education course, you'll learn why excellent business writing skills are so crucial in the workplace and how you can improve those skills.</p>	47152	
Mitigating Workplace Violence	60	<p>Learning how to mitigate workplace violence is a crucial part of providing a safe and secure work environment. Mitigating workplace violence is not only important so that departments can provide personnel with a safe workplace, but it also allows staff to recognize early warning signs and how to report them. This course will help departments learn how to recognize, identify, prevent, and respond to instances of workplace violence.</p>	47153	15 - OPERATIONS      20 - OPERATIONS
Preventing Sexual Harassment	60	<p>Fire and EMS personnel come to work ready to face any call that comes their way. When facing a difficult call, resting at the station between calls, or interacting with other personnel, there may be times that an individual is made to feel uncomfortable in their working environment. Every employee deserves to work in an environment free from harassment. In this course, we'll examine what constitutes sexual harassment, ways to prevent it, and how to cultivate a safe working environment.</p>	47154	15 - OPERATIONS      20 - OPERATIONS

## Approved Courses by Virginia Office of EMS (VAOEMS)

Endocrine Emergencies (ALS)	90	<p>The endocrine system plays a key role in managing fluid balance, hormones, electrolytes, and chemicals to maintain homeostasis in the body. Parts of this system may fail for various reasons, warranting EMS intervention. In this course, we'll review the endocrine system and its structures. Then, we'll examine the causes, symptoms, and treatment for diabetic emergencies like diabetic ketoacidosis, thyroid disorders, including thyroid storm and myxedema, adrenal gland disorders (like Cushing's disease and Addison's disease), and finally parathyroid gland emergencies, including hypercalcemia and hypocalcemia.</p>	47155	19 - MEDICAL
Endocrine Emergencies (BLS)	90	<p>The endocrine system plays a key role in managing fluid balance, hormones, electrolytes, and chemicals to maintain homeostasis in the body. Parts of this system may fail for various reasons, warranting EMS intervention. In this course, we'll review the endocrine system and its structures. Then, we'll examine the causes, symptoms, and treatment for diabetic emergencies like diabetic ketoacidosis, thyroid disorders, including thyroid storm and myxedema, adrenal gland disorders (like Cushing's disease and Addison's disease), and finally parathyroid gland emergencies, including hypercalcemia and hypocalcemia.</p>	47156	14 - MEDICAL
Drugs and Alcohol Awareness	60	<p>This course aims to educate about the dangers and outcomes of drug and alcohol (or substance) use. According to the National Center for Drug Abuse Statistics, almost 15% of Americans aged 12 and over used illicit drugs in the last month, with a projected 3.8% increase each year. Likewise, 20.4% of Americans in the same age group have an alcohol use disorder. By the end of the course, you'll be able to recognize various addictive substances and understand the significance of these substances in fire and emergency services. Additionally, you'll learn about the role of an Employee Assistance Program (EAP) and other resources in supporting a healthy workplace.</p>	47157	15 - OPERATIONS 20 - OPERATIONS



## Approved Courses by Virginia Office of EMS (VAOEMS)

A Safer, Smarter Ambulance	60	<p>In this course, Deputy Chief Michael McCart discusses how the fire service is in need of evolving to having safer, smarter ambulances. McCart explains current ambulance features and how they are work in order to keep passengers and crew members safe. In addition, McCart discussing the how's and why's ambulances need to be adapted to be safer and smarter and the advice he is giving in order to make this possible.</p>	47158	
Advanced Airway Management	60	<p>Patients that can't breathe require immediate and precise intervention. When the call comes, you need to be ready. Assessment and management of the airway is a vital component in the pre-hospital provider's repertoire. This course will examine key aspects of airway assessment and management to ensure the advanced provider is well-prepared to respond to respiratory emergencies in the field.</p>	47159	16 - AIRWAY, RESPIRATION, VENTILATION
Pediatric Assessment (ALS)	60	<p>When assessing a pediatric patient, some techniques may have to be adapted from those used on adult patients. Pediatrics come with different ranges of vitals, their developmental milestones will need to be considered when assessing, and their ability to respond to questions may hinder your understanding of events that lead to the current situation. It is important to have a caregiver or parent present to assist in giving you the important details to ensure your assessment is accurate.</p>	47160	19 - MEDICAL
Pediatric Assessment (BLS)	60	<p>When assessing a pediatric patient, some techniques may have to be adapted from those used on adult patients. Pediatrics come with different ranges of vitals, their developmental milestones will need to be considered when assessing, and their ability to respond to questions may hinder your understanding of events that lead to the current situation. It is important to have a caregiver or parent present to assist in giving you the important details to ensure your assessment is accurate.</p>	47161	14 - MEDICAL

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HIPAA for First Responders	60	HIPAA provides protections to ensure that patient identities and their protected health information remain confidential. It's important that all EMS providers take steps and caution to prevent any violations of HIPAA. This course will act as a reminder to ensure providers take the necessary precautions to avoid any information breaches.	47162		
Chest Pain in Women (ALS)	60	It is critical for EMS providers to have an understanding of the ways chest pain can present between men and women. Too often, chest pain and heart attacks in female patients can go untreated and undiagnosed. This course will examine the similarities and differences men and women experience with angina and the differences in causes.	47163		19 - MEDICAL
Chest Pain in Women (BLS)	60	It is critical for EMS providers to have an understanding of the ways chest pain can present between men and women. Too often, chest pain and heart attacks in female patients can go untreated and undiagnosed. This course will examine the similarities and differences men and women experience with angina and the differences in causes.	47164	14 - MEDICAL	
Confirming Tube Placement	60	Confirming tube placement can be difficult if you don't know what signs to look for. Using a capnography machine is one way to confirm tube placement and ensure you provide the right patient care. In this course, we will review the makeup of the lungs, how gases are exchanged, and the importance of monitoring waveforms to confirm the tube remains in the right position and the patient is not under or over-ventilated.	47165		16 - AIRWAY, RESPIRATION, VENTILATION
EMS and Athletic Training	60	Athletic trainers are medical professionals who work directly with athletes to prevent injuries from happening but also to care for those injuries when they do occur. Working hand in hand with EMS providers is important to ensure a smooth treatment and transition of patients both on and off the field. In this Podcast, we will review how EMS providers and athletic trainers can work together to achieve this and create a better working relationship for all involved.	47166	14 - MEDICAL	19 - MEDICAL
Pediatric Burn Management	30	Treating pediatric burn victims requires a different approach than treating an adult burn patient. In this podcast, Debbie Harrell of Shriners Hospital and Deputy Chief Terence Sheehy will discuss what EMS providers should focus on when treating pediatric burn patients, how to identify signs of abuse, and the appropriate measurements to follow when administering fluids to a burn patient.	47167		18 - TRAUMA

## Approved Courses by Virginia Office of EMS (VAOEMS)

Thinking Fast Acting Slow	30	EMS incident outcomes can be drastically improved simply by taking a second to stop and think quickly on one's feet about how to proceed can save precious minutes when responding. As discussed in this Real Life Rescues podcast episode, taking a moment to stop and think can help prevent operational miscues and allow for faster treatment and transport of the patient. From the mayhem of the Jerusalem Bus Terminal to treating a crane operator 30 floors up on his crane, and from a car hanging on the brink of a cliff to a more run-of-the-mill call for a fallen patient and needing to get them down six flights of stairs, thinking fast and acting slow can save a lot of time and anguish for both the providers and the patients while showing them an extra level of care.	47168	15 - OPERATIONS	20 - OPERATIONS
Hazmat Awareness (Hazcom)	60	First responders can mitigate risks and personal bodily harm by being aware of where to find life-saving information in an emergency and being prepared for likely outcomes. This course is designed to equip firefighters and emergency response personnel with essential knowledge and skills to navigate the release of chemicals and hazardous substances. This course will cover relevant material for NFPA 704, NFPA 472, and the OSHA Hazard Communication Standard. Key topics include understanding chemical safety hazards, recognizing potential threats posed by hazardous substances in different environments, and ensuring effective communication of critical information. This course emphasizes the importance of clear and accessible chemical identity and hazard information, aligning with OSHA standards and the right to know.	47169	15 - OPERATIONS	20 - OPERATIONS
Non-Invasive Ventilation	60	This course will discuss considerations for utilizing non-invasive ventilation such as CPAP, BiPAP, and nasal capnography in the pre-hospital environment.	47170	11 - AIRWAY, RESPIRATION, VENTILATION	16 - AIRWAY, RESPIRATION, VENTILATION
Crew Resource Management	60	Crew Resource Management (CRM) or non-technical skills are the social, cognitive, and personal resource skills that complement a worker's technical skills. Initially developed in the air transport industry, CRM training has been adopted by all branches of the United States military and is being integrated into both the medical and emergency services.	47171	15 - OPERATIONS	20 - OPERATIONS
Treating Stroke Patients	60	When it comes to providing care to patients suffering from a stroke, rapid and appropriate intervention is key. EMS providers must be able to quickly recognize the signs of a stroke and differentiate between the types of strokes to transport the patient to the correct care facility. In this course, we'll look at patient scenarios of ischemic stroke, hemorrhagic stroke, subarachnoid hemorrhages, large vessel occlusions, and transient ischemic attacks.	47172		17 - CARDIOVASCULAR

## Approved Courses by Virginia Office of EMS (VAOEMS)

Trauma Management Skills	60	Whether you are responding to a mass casualty event or a multi-vehicle car crash, learning more about trauma management skills will prepare providers for efficient and effective responses. The key topics discussed in this course are different methods to stop the bleeding, spinal immobilization techniques, and needle decompression of the chest.	47173		18 - TRAUMA
Pediatric Drowning (ALS)	60	This course provides EMS professionals with comprehensive training on assessing, managing, and preventing pediatric drowning incidents. Participants will learn how to navigate the complexities of drowning emergencies, with a focus on ensuring scene safety, implementing lifesaving interventions, and understanding the unique physiological factors that affect pediatric drowning victims.	47174		18 - TRAUMA
Pediatric Drowning (BLS)	60	This course provides EMS professionals with comprehensive training on assessing, managing, and preventing pediatric drowning incidents. Participants will learn how to navigate the complexities of drowning emergencies, with a focus on ensuring scene safety, implementing lifesaving interventions, and understanding the unique physiological factors that affect pediatric drowning victims.	47175	13 - TRAUMA	
Basic First Aid Response	120	Medical emergencies can happen anywhere and at any time. Someone's life may depend on your ability to rapidly recognize and intervene in certain cases. This course will refresh your knowledge of how to provide first aid for people in need of medical attention while you wait for further medical help to arrive. Topics will include initial actions, consent, recognizing sudden illnesses, CPR, choking, bleeding control, injury types, as well as cold and heat stress.	47176	14 - MEDICAL	
Post Partum Emergencies	30	Giving birth is one of life's many miracles but it can sometimes come with post partum complications. This course is an overview of emergencies that can happen in the post-partum period. Topics will include post-partum cardiomyopathy, eclampsia, thromboembolic disease, and more.	47177	14 - MEDICAL	19 - MEDICAL
Basic Airway Techniques	60	Ensuring an efficient and effective airway is crucial for patient survival. Throughout this course, there will be demonstrations of airway techniques to assist and treat patients experiencing respiratory emergencies.	47178	11 - AIRWAY, RESPIRATION, VENTILATION	16 - AIRWAY, RESPIRATION, VENTILATION
Pediatric Septic Shock	60	Sepsis is one of the leading causes of death in pediatric patients in the US. In the past, little was known about proper prehospital identification and often treatment was not provided. Luckily, a shift in focus on sepsis has lower mortality rates from 9% to 4.5%. This course will explain sepsis and how it impacts pediatric patients and describe how to identify and treat sepsis for more successful outcomes.	47179		19 - MEDICAL

## Approved Courses by Virginia Office of EMS (VAOEMS)

Active Shooter and EMS	60	<p>Arriving at the scene of an active shooter event means many things for emergency medical providers. First, it's considering the different kinds of response that must occur here to protect victims, other providers, and yourself. Second, it's identifying the need for triage for the trauma patients you will face. Third, it's providing the proper levels of care to victims. And lastly, it's ensuring you are keeping yourself safe. Understanding the whole picture when responding to an active shooter event is imperative to a successful, safe response.</p>	47180	13 - TRAUMA	18 - TRAUMA
LVO Stroke Recognition	60	<p>Prehospital stroke care continues to evolve. Over the past five years, mechanical thrombectomy has emerged as the preferred treatment option for patients presenting with large vessel occlusion strokes. EMS agencies are now being challenged to recognize large vessel occlusions on-scene and consider direct transport to comprehensive stroke centers for mechanical thrombectomy. In this course, we will review the current paradigm of prehospital stroke care, review the growing body of literature evaluating prehospital stroke severity tools, and discuss the numerous items affecting transport decisions.</p>	47181	12 - CARDIOVASC ULAR	17 - CARDIOVASCUL AR
It's Not Always Sepsis	60	<p>Sepsis is brought on by an infection that should be treated right away when identified. However, it can be very difficult to identify sepsis in both the pre-hospital and hospital settings. In this course, we will review how to identify sepsis in the pre-hospital setting, treat it once you determine it is sepsis, and hand off a patient to the hospital for continued care.</p>	47182		19 - MEDICAL
Roadside Safety Issues	90	<p>Emergency responses to road and highway incidents are some of the most dangerous work faced by firefighters and emergency medical personnel. According to the National Highway Traffic Safety Administration (NHTSA), on average, 23 roadside workers and first responders are killed in motor vehicle-related crashes on the roadside, with hundreds of others suffering injuries from the same. Blocking with a fire apparatus can help protect fire and EMS personnel, but that's only one aspect of an overall system of strategies and tactics for highway incident response. As we will discuss in this course, there are several tactics responders should implement to provide opportunities for a safer roadside incident work area.</p>	47183	15 - OPERATIONS	20 - OPERATIONS
Managing EMS Burnout	60	<p>Burnout among EMS professionals has negative effects for agencies, providers, and patients. Nevertheless, traditional interventions for reducing burnout are often focused on the individual and fail to address the true systematic causes. In this course, Dr. Remle Crowe will discuss the latest research and present organizational-level strategies to reduce and prevent burnout at your EMS agency.</p>	47184	15 - OPERATIONS	20 - OPERATIONS

## Approved Courses by Virginia Office of EMS (VAOEMS)

Mobile Stroke Units	60	<p>A stroke occurs in the U.S. every 40 seconds. Rapid intervention has shown great increases in the quality of life for those recovering from strokes. Mobile stroke units are designed to help reach stroke patients quickly and improve survival rates. This course will discuss considerations for EMS involving the use of mobile stroke care units. EMS providers are aware that lifting and moving patients is a high-risk activity both for the patient and for the provider. This presentation will provide a framework for EMS in how to make the risk assessment when faced with lifting and moving challenges. Whether or not to allow a patient to walk to the transport unit or whether to take the time and effort involved in a difficult carry is a decision EMS is faced with every shift. We will also review a legal case in which EMS was sued for walking a cardiac patient down stairs.</p>	47185	12 - CARDIOVASC ULAR	17 - CARDIOVASCUL AR
Walking the Patient	30	<p>This course is a collection of microlearning courses that focus on how EKGs and ECMO may be used in the field. Industry leaders from FDIC and JEMS conference talk about how ECMO if used properly can affect patient outcomes, the future of ECMO, accurate EKG interpretation and much more.</p>	47186	15 - OPERATIONS	20 - OPERATIONS
EKG and ECMO in EMS	30	<p>Regardless of the patient's age, the goal is the same - to provide safe and timely transport for the patient. There are crucial considerations EMS providers must implement when transporting pediatric patients in both emergent and non-emergent situations. In this course, we'll examine standards and recommendations from national organizations like the NHTSA (National Highway Traffic Safety Administration), the DOT (Department of Transportation), and the CDC (Center for Disease Control). We'll monitor, study, and review the safe transportation of children in ground ambulances.</p>	47187	12 - CARDIOVASC ULAR	17 - CARDIOVASCUL AR
Pediatric Transport	60	<p>The human face is often the first thing you recognize when meeting someone. When there is a disfiguring injury, it is difficult to see. As first responders, we must overcome that difficulty and put aside the shock and start to assess your patient. In this course, we'll discuss facial anatomy and physiology, how to anticipate injuries by recognizing the mechanism of injury, and hidden associated injuries and hidden bleeding. You'll get practice in setting priorities in patient care when facial injury is involved and anticipating changes in your patient's condition during treatment and transport will make a difference in your patient's outcome.</p>	47188	15 - OPERATIONS	20 - OPERATIONS
Facial Trauma (ALS)	60		47189		18 - TRAUMA

## Approved Courses by Virginia Office of EMS (VAOEMS)

Facial Trauma (BLS)	60	The human face is often the first thing you recognize when meeting someone. When there is a disfiguring injury, it is difficult to see. As first responders, we must overcome that difficulty and put aside the shock and start to assess your patient. In this course, we'll discuss facial anatomy and physiology, how to anticipate injuries by recognizing the mechanism of injury, and hidden associated injuries and hidden bleeding. You'll get practice in setting priorities in patient care when facial injury is involved and anticipating changes in your patient's condition during treatment and transport will make a difference in your patient's outcome.	47190	13 - TRAUMA	
Pediatric Restraint	60	Proper restraints are the key to ensuring the safety of pediatric patients during transport. In this podcast, you will hear from experts as they discuss different considerations on safely restraining pediatric patients during transport and how to be prepared during these operations.	47191	15 - OPERATIONS	20 - OPERATIONS
Congenital Syphilis	60	Congenital syphilis is a severe and often life-threatening infection seen in infants whose mothers were infected. In this course, Katherine West, an infection control consultant, addresses the alarming rise in congenital syphilis, a condition transmitted from mother to infant during pregnancy.	47192	14 - MEDICAL	19 - MEDICAL
Identifying Sepsis in the Prehospital Setting	60	There are multiple reasons for the rapid increase in congenital syphilis, including inadequate prenatal care and treatment. This course focuses on the importance of universal screening, proper treatment, and the role of healthcare providers and EMS in addressing this preventable condition.	47193	14 - MEDICAL	19 - MEDICAL
Back Safety in EMS	60	Ensuring patients with septic shock receive quick and proper care is vital to having a positive outcome. Septic is a common call in EMS and knowing the proper symptoms and screening tools can mean life or death for many patients. In this course, Dr. Christopher Hunter defines sepsis, identifying screening tools, and the different protocols when encountering a person with suspected sepsis.	47194	15 - OPERATIONS	20 - OPERATIONS
Hemorrhage Control	60	Lifting patients onto stretchers for transport is a common occurrence in EMS. Unfortunately, lifts performed improperly can lead to EMS providers getting hurt. In this course, we'll discuss the potential hazards from finding patients in hard to reach locations and the need for utilizing proper lifting techniques to prevent injury.	47195	13 - TRAUMA	18 - TRAUMA
		Death due to uncontrolled bleeding is often preventable. In EMS, we have tools and resources to help mitigate or alleviate the effects of hemorrhage. Be a part of the difference of life and death, by learning effective hemorrhage control. In this course, we'll discuss internal and external bleeding and the treatment options for both, as well as considerations and treatments for EMS providers responding to hemorrhagic patients.			

## Approved Courses by Virginia Office of EMS (VAOEMS)

Leadership Is...	60	In this course, Peter Van Dorpe discussed multiple components of the hard work that is leadership. Leaders are called to lead through difficult and, at times, unpleasant situations. However, through this experience, leaders can grow and develop to become the best leader they can be. After examining qualities of a good leader and some lessons from wise leaders, now you have a plethora of inspiration and motivation to put this knowledge to good use.	47196		
Lockout/Tagout	60	Responding to an emergency call at a location that handles hazardous materials and machines can be a frightening situation if you do not have the proper training. Industries that work with such materials are required to have a lockout/tagout system in place to prevent these situations from happening, but sometimes accidents will happen anyway. As a first responder, you must go into these calls with your training, an understanding of how to handle these locks and tags, and knowing that you will have to be even more cautious when providing care as your actions may have adverse reactions when it comes to dealing with hazardous materials and machines.	47197	15 - OPERATIONS	20 - OPERATIONS
Street Drugs	60	Another overdose ... great! Can you figure out what the patient overdosed on from how he presented? Today's street drugs are ever evolving. From the different types of Fentanyl to exquisite drugs like DMT, the names keep changing, so shouldn't we when assessing them? Come see what the more common drugs are out there, how they are consumed, and how we can look at the patients to identify what they could be on.	47198	14 - MEDICAL	19 - MEDICAL
Medic Math	30	Medic math can be used to determine the proper dose of medicine necessary for a patient. The formula taught in this course accounts for volume, dosage, desired doses, time, and drip ratings. Here, you will be shown different examples to learn how to decipher different medication administration techniques with weight and non-weight-based dosing and over various periods of time.	47199		19 - MEDICAL
Confined Space Safety	60	In every community, there are spaces with unique characteristics that present potential hazards. These areas, referred to as confined spaces, are defined by their limited access and egress, making entry and exit particularly challenging. Confined spaces can exist in diverse settings, including industrial facilities, construction sites, and public infrastructure. Examples include tanks, silos, tunnels, manholes, and pipelines. Despite appearing unremarkable, these spaces often harbor hidden dangers, such as toxic atmospheres, engulfment risks, or hazardous structural configurations, which pose serious threats to individuals who enter without proper training and safety measures.	47201	15 - OPERATIONS	20 - OPERATIONS

## Approved Courses by Virginia Office of EMS (VAOEMS)

Electrical Hazards for First Responders	90	<p>40 years of statistical data conclude that of all the harmful workplace exposures, electricity exposure is the leading cause of workplace fatality. These statistics include fire and EMS professionals and their encounters with electrical hazards. Electricity operates in every building, is used by many components of emergency equipment, and spans across every open space as a power line - making the possibility of electrocution and electric shock a common workplace consideration. As a first responder, you must understand how to handle electrical hazards on the fireground or incident scene for your safety and the safety of everyone at the scene. By the end, you'll be able to recognize critical electrical hazards and understand how to protect yourself from electric shock while working in fire and emergency services. This course addresses standards OSHA CFR 1910 (subpart S), OSHA 29 CFR 1926 (subpart K), and NFPA 70E.</p> <p>At 8% oxygenation in the atmosphere, fatality can occur in 8 minutes. The odds are, you will respond to calls with respiratory hazards. Clear thoughts and oxygenated muscles will help you on any emergency scene. Clear, oxygenated air supports your body's life-supporting functions and keeps you performing at your best. All emergency personnel must properly utilize their respiratory protection. This course will detail the foundational principles for establishing and using respiratory protection in the fire and EMS sectors of service in consultation with OSHA 29 CFR 1910.134, NFPA 1981 and NFPA 1852 SCBA Standards, NFPA 1970, NIOSH 30 CFR Part 11 and NIOSH 42 CFR Part 84.</p>	47202	13 - TRAUMA	18 - TRAUMA
Respiratory Protection for First Responders	90	<p>In the last five years, the United States has been averaging 23 weather disasters per year, each costing at or above a billion dollars in damages. Severe weather brings severe environmental conditions that place fire and EMS professionals at risk. Up to 75% of firefighters report symptoms of a heat-related illness at some point, and the US Bureau of Labor Statistics averages about 3 worker deaths per year for professionals working outdoors in cold weather. To combat these statistics and protect emergency responders, they need to be aware of the risks, causes, signs, and symptoms of cold injuries and heat-related illnesses and how to treat them. To support that effort, this course bases its information on guidelines from OSHA, NFPA 1550, NFPA 1580, and NFPA 1584.</p> <p>When a patient is hemorrhaging, EMS providers must act quickly and accurately to help save the patient. This JEMS CEU course will explore bleeding management of the severely injured, external hemorrhage control guidelines, and dispel hemorrhage control myths. Depending on the location of the injury, wound packing may be necessary. This course will also explore wound packing essentials for EMS and discuss how and when to escalate hemorrhage control to more invasive means.</p>	47203	11 - AIRWAY, RESPIRATION, VENTILATION	16 - AIRWAY, RESPIRATION, VENTILATION
Cold Stress, Heat Illness, and Extreme Weather	60	<p>When a patient is hemorrhaging, EMS providers must act quickly and accurately to help save the patient. This JEMS CEU course will explore bleeding management of the severely injured, external hemorrhage control guidelines, and dispel hemorrhage control myths. Depending on the location of the injury, wound packing may be necessary. This course will also explore wound packing essentials for EMS and discuss how and when to escalate hemorrhage control to more invasive means.</p>	47204	13 - TRAUMA	18 - TRAUMA
JEMS CEUs: Hemorrhage Control and Wound Packing	60	<p>When a patient is hemorrhaging, EMS providers must act quickly and accurately to help save the patient. This JEMS CEU course will explore bleeding management of the severely injured, external hemorrhage control guidelines, and dispel hemorrhage control myths. Depending on the location of the injury, wound packing may be necessary. This course will also explore wound packing essentials for EMS and discuss how and when to escalate hemorrhage control to more invasive means.</p>	47205	13 - TRAUMA	18 - TRAUMA

## Approved Courses by Virginia Office of EMS (VAOEMS)

Personal Protective Equipment (PPE)	90	<p>When was the last time you or someone you know got hurt on the job? Studies show that firefighters sustain about 60,000 injuries annually, and EMS professionals sustain about 23,000 injuries annually from responding to emergency calls. That doesn't include regular injuries sustained at the station or over time. PPE can lessen the impact of these injuries and help you to keep answering the next call for help. This course will address the types of PPE available for fire and EMS professionals, legal requirements from OSHA regulations, and tips for maintaining your equipment and staying "combat ready." NFPA 1971, OSHA 29 CFR 1910, and OSHA 29 CFR 1926 are referenced throughout.</p>	47206	Cat. 2	Cat. 2
Hearing Conservation for First Responders	60	<p>Research has found that about 40% of firefighters experience some level of hearing loss due to exposure on the field and in the firehouse. When we think about hearing loss, we assume it is only caused by long durations or loud noises, which is incorrect. Further research has been done on the subject and found that it is not only noise exposure but also exposure to certain harmful chemicals that we are exposed to in the field. While most forego the use of hearing protective equipment to avoid not hearing communications of sounds of the scene, they are doing more harm than good because the more exposure they subject themselves to in those instances, the worse off their hearing will be in the near future.</p>	47207	15 - OPERATIONS	20 - OPERATIONS
Hand and Portable Power Tool Equipment Safety	90	<p>With over 1 million injuries a year, national organizations take safety, especially hand and portable power tool safety, very seriously. Being trained and knowing which personal protective equipment will protect you from the hazards of the tool is only a starting point for injury prevention. In this line of work, injuries come far too frequently. The job of a first responder is difficult, but tools, when used properly, can make the job easier. To reach the victim. To stabilize the structure. To secure a wound or secure an egress from a situation. Whatever the use may be, tools can save lives; however, when used incorrectly, they can take them too.</p>	47228	15 - OPERATIONS	20 - OPERATIONS
Toxic Chemical Handling and Exposure	60	<p>When's the last time you had to work on your apparatus or emergency vehicle, repaint a section of the wall, or even just clean something at work? What if I told you that you were being exposed to toxic and potentially deadly chemicals? Unfortunately, as first responders attend different kinds of calls on various emergency scenes, you may not know what toxic hazards you're walking into. Being aware of some of the most common chemical exposures, their health impacts, and ways to mitigate the hazard may be your best bet at protecting yourself, your crew, and even your family – as you make sure not to bring contamination home with you.</p>	47232	15 - OPERATIONS	20 - OPERATIONS

## Approved Courses by Virginia Office of EMS (VAOEMS)

Automated External Defibrillators (AED) (BLS)	60	<p>Correctly using an AED can double or triple the patient's chance of survival. They have a long history and with modern advancements, they've come a long way; their capabilities may even surprise you. Be prepared for your next cardiac arrest call and know what your device can and cannot do.</p>	47225	12 - CARDIOVASC ULAR	
AI Prompting Essentials	60	<p>Artificial intelligence (AI) has taken the world by storm, becoming integrated into numerous aspects of daily life, from smart assistants on your phone to smart speakers in your home, and web-based sources, like ChatGPT or Gemini. Why let the technological spread stop at the fire and EMS services? Generate photo-realistic images to share with your students that fit your specifications. Draft an incident summary or collect key points from a policy document. The possibilities of how AI can be incorporated into departments are endless; you just have to provide the right prompt.</p>	47233	15 - OPERATIONS	20 - OPERATIONS
Reasonable Suspicion for Supervisors	120	<p>When it comes to drug use in the workplace, it is vitally important to have an understanding of the laws and regulations surrounding the topic, from the federal, state, and local levels. However, when suspicions of intoxication arise, how those suspicions are handled needs to be in accordance with laws and regulations that encompass the department.</p>	47229	15 - OPERATIONS	20 - OPERATIONS
Sleep Strategies for First Responders	60	<p>You may believe that, as a first responder, quality sleep just isn't possible for you, given your unconventional hours. One week you may be scheduled nights, but the next you transition to working days. This makes it difficult for your sleep schedule to keep up. The time to fix this cycle is now, and not when you retire. There are small daily changes you can make to improve your sleep hygiene and reach the necessary stages of sleep, aiding in your body's physical, mental, and emotional recovery.</p>	47231	15 - OPERATIONS	20 - OPERATIONS
Reducing Medication Errors (ALS)	60	<p>Over a million patients each year fall victim to medication errors. Almost 10,000 of these incidents result in fatal outcomes. Although there is no centralized database reporting the number of medication errors made by EMS providers, we can still work towards reducing these statistics by being more aware of potential field errors. Changes can be simple and implemented on a daily basis to enhance safer medication dosing.</p>	47230		19 - MEDICAL
Elder Abuse (ALS)	60	<p>MYTH – Elderly abuse is becoming less common as the general public becomes more aware. The reality is that statistics of abuse are climbing, and elderly abuse has become an even bigger concern over the past few years. You may have even noticed that geriatric patients make up a large percentage of your calls – up to 40% in many cases. Can you spot the signs of abuse? And once you do, what comes next? Documenting and reporting can seem daunting when you're worried that it may put you and your judgment under scrutiny as well. We'll cover these topics and what you can do to make suspected elder abuse reporting a little easier.</p>	47226		19 - MEDICAL

## Approved Courses by Virginia Office of EMS (VAOEMS)

Elder Abuse (BLS)	60	<p>MYTH – Elderly abuse is becoming less common as the general public becomes more aware. The reality is that statistics of abuse are climbing, and elderly abuse has become an even bigger concern over the past few years. You may have even noticed that geriatric patients make up a large percentage of your calls – up to 40% in many cases. Can you spot the signs of abuse? And once you do, what comes next? Documenting and reporting can seem daunting when you’re worried that it may put you and your judgment under scrutiny as well. We’ll cover these topics and what you can do to make suspected elder abuse reporting a little easier.</p>	47227	14 - MEDICAL
Managing the Pediatric Airway (ALS)	60	<p>When treating pediatric patients, certain factors must be considered. First, understand that pediatric airway anatomy and physiology differ from those of adult patients, whom you are more likely to treat. With this in mind, there are also pediatric-specific tools and equipment that you will use to treat these juvenile patients. The causes of their respiratory distress or failure can also differ from those of adults, and therefore, your assessments will need to focus on specifics, identifying causation or factors that exacerbate the symptoms.</p>	47234	16 - AIRWAY, RESPIRATION, VENTILATION
Managing the Pediatric Airway (BLS)	60	<p>When treating pediatric patients, certain factors must be considered. First, understand that pediatric airway anatomy and physiology differ from those of adult patients, whom you are more likely to treat. With this in mind, there are also pediatric-specific tools and equipment that you will use to treat these juvenile patients. The causes of their respiratory distress or failure can also differ from those of adults, and therefore, your assessments will need to focus on specifics, identifying causation or factors that exacerbate the symptoms.</p>	47235	11 - AIRWAY, RESPIRATION, VENTILATION
Polypharmacy for Geriatric Patients (BLS)	60	<p>Polypharmacy is the use of five or more medications in a single day, and it is generally more prevalent among the vulnerable elderly population. While polypharmacy itself is not the issue, the drugs that make up the medication list are. Some medications do not mix well with others and can lead to unwanted outcomes or make a simple call more serious. Sometimes, you are the only one who sees the dangers of these medication mixtures. Caregivers are overworked or just unaware of the dangers. As a medical provider, seeing the red flags of a polypharmacy issue, it is up to you to speak up and bring attention to a possibly deadly combination of medications.</p>	47236	14 - MEDICAL

## Approved Courses by Virginia Office of EMS (VAOEMS)

Polypharmacy for Geriatric Patients (ALS)	60	<p>Polypharmacy is the use of five or more medications in a single day, and it is generally more prevalent among the vulnerable elderly population. While polypharmacy itself is not the issue, the drugs that make up the medication list are. Some medications do not mix well with others and can lead to unwanted outcomes or make a simple call more serious.</p> <p>Sometimes, you are the only one who sees the dangers of these medication mixtures. Caregivers are overworked or just unaware of the dangers. As a medical provider, seeing the red flags of a polypharmacy issue, it is up to you to speak up and bring attention to a possibly deadly combination of medications.</p>	47237	19 - MEDICAL
Pharmacology Tips (ALS)	60	<p>Delivering medications in high-stress situations should not be the first time you think through your strategy. Your method of delivery, how to perform complex calculations, and how to administer medications for cardiac emergencies should be thought out ahead of time. In this course, we will explore the best ways to prepare preemptively for these situations and provide tips and tricks to ensure you deliver the right amount of medication using the correct method of administration.</p>	47238	19 - MEDICAL