

## Approved Courses by Pennsylvania Department of Health

Name	Course Length in Minutes	Description
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.
A Proactive Approach to Suicide Prevention	60	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.
A Safer, Smarter Ambulance	60	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.
Active Shooter and EMS	60	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.

**Approved Courses by Pennsylvania Department of Health**

<p>Acute Carbon Monoxide Poisoning</p>	<p>60</p>	<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>
<p>Advanced Airway Management</p>	<p>60</p>	<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>
<p>Advanced Airway Management in Cardiac Arrest</p>	<p>60</p>	<p>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.</p>
<p>Aided CPR Effects on Cardiac Arrest Outcomes</p>	<p>60</p>	<p>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.</p>

**Approved Courses by Pennsylvania Department of Health**

<p>Allergic Reactions and Anaphylaxis (ALS)</p>	<p>60</p>	<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>
<p>Allergic Reactions and Anaphylaxis (BLS)</p>	<p>60</p>	<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>
<p>Ambulance Operations: Driver Safety</p>	<p>60</p>	<p>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.</p>

## Approved Courses by Pennsylvania Department of Health

<p style="text-align: center;">Anaphylaxis: Life-Threatening Emergencies</p>	<p style="text-align: center;">60</p>	<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>
<p style="text-align: center;">Autism Awareness for First Responders</p>	<p style="text-align: center;">150</p>	<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>
<p style="text-align: center;">Avoiding Social Media Landmines for EMS Providers</p>	<p style="text-align: center;">60</p>	<p>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.</p>
<p style="text-align: center;">Avoiding the Dangers of Overventilation</p>	<p style="text-align: center;">60</p>	<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>

## Approved Courses by Pennsylvania Department of Health

Back Safety in EMS	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.
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.
Basic First Aid	120	When you provide first aid, it is important that you help both the victim and yourself. Take this course to find out how to avoid legal liability, prevent disease transmission and determine how and when to move victims. This course will remind you how to assess the scene and the victim as well as how to recognize cardiac incidents, perform CPR, treat choking and put victims in the recovery position. This course will also discuss bleeding control, shock and anaphylaxis, burns and electrical shock, sudden illnesses, as well as poisonings and bites. Additionally, this course will also refresh your memory for initial treatment of brain, spine, chest, abdominal, and pelvic injuries as well as bone, joint, and muscle injuries. Lastly, this course will discuss cold and heat emergencies.
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.
Blast Injuries, Triage, and Facial Trauma	30	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.

**Approved Courses by Pennsylvania Department of Health**

<p>Blood Products for Managing Hemorrhage and Shock Patients</p>	<p>30</p>	<p>Hemorrhage and the patient's ability to clot can drastically affect patient outcomes. As an ALS provider, you must be able to quickly recognize the signs and risks of hemorrhage and shock to provide proper treatment. This training collection will examine the common types of shock, and how blood products and medication can be used to manage patients who are hemorrhaging. In this training collection, Christopher McLaughlin will also discuss effects of disease and medication on the body's ability to clot effectively.</p>
<p>Bloodborne and Airborne Pathogens for First Responders</p>	<p>60</p>	<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>
<p>Building Integrity in the Workplace</p>	<p>30</p>	<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>
<p>Building Teams That Promote Growth and Leadership</p>	<p>60</p>	<p>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.</p>
<p>Burn Care for Patients and Firefighters</p>	<p>60</p>	<p>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.</p>

**Approved Courses by Pennsylvania Department of Health**

Business Writing Fundamentals	60	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.
Cannabinoid Hyperemesis Syndrome	60	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?
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.
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.

**Approved Courses by Pennsylvania Department of Health**

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.
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.
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.



**Approved Courses by Pennsylvania Department of Health**

<p>Community Paramedicine and Children</p>	<p>60</p>	<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>
<p>Conducting Evidence-Based Investigations</p>	<p>60</p>	<p>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.</p>
<p>Confined Spaces</p>	<p>60</p>	<p>Many people think of a confined space as a small, dark space like a closet or crawl space. Confined spaces include much more than just tight spaces with limited light. They have shared characteristics that you can use to better identify them. If one of your co-workers passed out in a confined space, would you go in to rescue him? Can you be sure the air in the space is safe? This training will help you understand the risks associated with confined spaces and the procedures your employer has in place to protect you and those around you. Do not take this information lightly as it can make the difference between life and death!</p>

**Approved Courses by Pennsylvania Department of Health**

<p>Confirming Tube Placement</p>	<p>60</p>	<p>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.</p>
<p>Considerations for Common Vehicle Accident Injuries</p>	<p>30</p>	<p>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.</p>
<p>CPAP and Capnography: A Dynamic Duo</p>	<p>60</p>	<p>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.</p>
<p>Crash Course in Toxicology: Five Deadly Overdoses to Know</p>	<p>60</p>	<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>

**Approved Courses by Pennsylvania Department of Health**

<p>Creating Effective Training Simulations</p>	<p>60</p>	<p>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.</p>
<p>Crew Resource Management</p>	<p>60</p>	<p>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.</p>
<p>Cricothyrotomy: Surgical Airway Realities</p>	<p>60</p>	<p>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.</p>
<p>Defensive and Distracted Driving</p>	<p>120</p>	<p>Most vehicle accidents are actually the result of human error. If an error is made at the wrong moment, an accident or collision will result. A consistent, defensive approach to driving is the best way to reduce the likelihood of driver error. The goal of this course is to provide drivers of large vehicles with the knowledge and safe driving techniques they need to prevent collisions and violations. A split-second decision can change your life, especially when you are behind the wheel of a fast-moving, heavy vehicle. This course will also discuss distracted driving, changing lanes safely, speed effects on stopping distance, tailgating, and extreme driving conditions (such as rain, snow, ice, fog, or extremely hot or cold weather).</p>

**Approved Courses by Pennsylvania Department of Health**

<p>Drugs and Alcohol Awareness</p>	<p>60</p>	<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>
<p>Drugs and Alcohol: The Facts</p>	<p>90</p>	<p>Substance abuse causes harm to more people than just the abuser. Are the effects of cannabis different than other controlled substances? What do I need to know about cannabis as it relates to workplace safety? This course teaches workers what substance abuse is and it outlines the costs of substance abuse to employers and co-workers. It also provides facts about commonly abused substances and how to reduce the risks of substance abuse. This course will also discuss the properties of cannabis, its effects, potential consequences of working while impaired and strategies you can use at your workplace to keep everyone safe. This course is ideal for all learners.</p>
<p>E-CPR, VADs and ECMO: Oh My!</p>	<p>60</p>	<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>

### Approved Courses by Pennsylvania Department of Health

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.
Egress and Emergency Action Plans	30	Fires, severe weather, medical emergencies, chemical releases, bomb threats and other hazardous situations can threaten life and limb. Precautions reduce the number of injuries and deaths attributable to these threats. This course will focus on two important aspects of this effort: egress and emergency action plans.
EKG and ECMO in EMS	30	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.
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 course, we will review how EMS providers and athletic trainers can work together to achieve this and create a better working relationship for all involved.

## Approved Courses by Pennsylvania Department of Health

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>
EMS in Civil Unrest and SWAT Operations	60	<p>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.</p>
EMS Operations: Evidence-Based Medicine, Water Operations, and Training	60	<p>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 methods in evidence based medicine, the pitfalls of water operations, how training counts and the importance of self-aid buddy aid.</p>
EMS Research and How it Affects Your Practice	60	<p>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.</p>
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>

**Approved Courses by Pennsylvania Department of Health**

<p>Endocrine Emergencies (BLS)</p>	<p>90</p>	<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>
<p>Epinephrine, Glucometers, and Naloxone</p>	<p>60</p>	<p>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.</p>
<p>EVALI: e-Cigarettes and Vaping Lung Injuries</p>	<p>60</p>	<p>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.</p>
<p>Facial Trauma (ALS)</p>	<p>60</p>	<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>

**Approved Courses by Pennsylvania Department of Health**

<p>Facial Trauma (BLS)</p>	<p>60</p>	<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>
<p>Fall Protection</p>	<p>60</p>	<p>Each year, many workers are hurt or killed as a result of falls in the workplace. Falls are usually complex events that involve a variety of factors. For that reason, the OSHA fall protection standard deals with both human- and equipment-related issues for protecting workers from fall hazards. This training will cover systems and procedures designed to prevent falls off, onto or through working levels and to protect workers from being struck by falling objects.</p>
<p>Hand and Power Tool Safety</p>	<p>30</p>	<p>Most of us use tools in our daily work. But do you realize how dangerous tools can be if they are not handled correctly? This training focuses on the importance of hand and power tool safety, the hazards that can lead to injuries and deaths, and the precautions needed to work safely with these tools.</p>
<p>Hazmat Awareness (Hazcom)</p>	<p>60</p>	<p>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.</p>



## Approved Courses by Pennsylvania Department of Health

Hearing Conservation	30	Did you know that most noise-related hearing loss is completely preventable? In this course, you will learn about the noise risks in your workplace and what you need to do to protect your hearing. Protection against excessive noise exposure is the only way to avoid permanent hearing damage. In this course, you will learn about types of hearing protection as well as how to select, wear and maintain hearing protection.\
Hemorrhage Control	60	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.
High-Consequence Infectious Disease Awareness	60	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.
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.
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.

**Approved Courses by Pennsylvania Department of Health**

<p>How Prehospital Stroke Care is Changing</p>	<p>60</p>	<p>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.</p>
<p>Identifying and Responding to Human Trafficking</p>	<p>60</p>	<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>
<p>Identifying Cardiac Emergencies Using 12-Lead ECG</p>	<p>60</p>	<p>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.</p>
<p>Identifying Sepsis in the Prehospital Setting</p>	<p>60</p>	<p>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.</p>

**Approved Courses by Pennsylvania Department of Health**

<p>Improving Assessment and Pediatric Care</p>	<p>30</p>	<p>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.</p>
<p>Improving Pediatric Resuscitation Rates</p>	<p>60</p>	<p>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.</p>
<p>Infectious and Communicable Diseases</p>	<p>60</p>	<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>
<p>Influenza and Provider Hygiene (ALS)</p>	<p>60</p>	<p>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.</p>

**Approved Courses by Pennsylvania Department of Health**

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.
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.
Intellectual Disabilities and Their Impact on Assessment	60	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.
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.
It's Not Always Sepsis	60	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.

**Approved Courses by Pennsylvania Department of Health**

<p>JEMS CEUs: Behavioral Emergency Response Considerations</p>	<p>60</p>	<p>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.</p>
<p>JEMS CEUs: Caring for Patients with Dementia or Alzheimer's</p>	<p>60</p>	<p>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.</p>
<p>JEMS CEUs: Considerations for Geriatric Trauma Patient Care</p>	<p>60</p>	<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>
<p>JEMS CEUs: End-Tidal CO2 and Capnography</p>	<p>60</p>	<p>The importance of end-tidal CO2 (EtCO2) and capnography cannot be overstated for prehospital providers. This JEMS CEU course discusses the importance of EtCO2 and how to use PQRST method for interpretation using clinical applications and examples. You'll also delve into using EtCO2 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>

**Approved Courses by Pennsylvania Department of Health**

<p>JEMS CEUs: Facial Weakness, Palsy, and Stroke</p>	<p>60</p>	<p>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.</p>
<p>JEMS CEUs: Fluid Resuscitation in Trauma Patients</p>	<p>60</p>	<p>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.</p>
<p>JEMS CEUs: Neonate and Infant Care Considerations</p>	<p>60</p>	<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>
<p>JEMS CEUs: Sudden Death and Cardiac Arrest</p>	<p>60</p>	<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, intercranial 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>

**Approved Courses by Pennsylvania Department of Health**

Leadership is...	60	<p>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.</p>
Lockout/Tagout	60	<p>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.</p>
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>
Management of Acute Burn Injuries	60	<p>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.</p>
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>

**Approved Courses by Pennsylvania Department of Health**

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.
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.
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.
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.
Mitigating Workplace Violence	60	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.
Mobile Stroke Units	60	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.



**Approved Courses by Pennsylvania Department of Health**

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.
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.
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.
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.
Patient Care: Acute Mental Illness or Suicide Ideation	60	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.
Pediatric Assessment (ALS)	60	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.

## Approved Courses by Pennsylvania Department of Health

<p style="text-align: center;">Pediatric Assessment (BLS)</p>	<p style="text-align: center;">60</p>	<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>
<p style="text-align: center;">Pediatric Burn Management</p>	<p style="text-align: center;">30</p>	<p>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.</p>
<p style="text-align: center;">Pediatric Cardiac And Respiratory Arrest (ALS)</p>	<p style="text-align: center;">60</p>	<p>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.</p>
<p style="text-align: center;">Pediatric Cardiac And Respiratory Arrest (BLS)</p>	<p style="text-align: center;">60</p>	<p>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.</p>
<p style="text-align: center;">Pediatric Management: HandTevy, Broselow, PALS</p>	<p style="text-align: center;">60</p>	<p>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.</p>

**Approved Courses by Pennsylvania Department of Health**

<p>Pediatric Restraint</p>	<p>60</p>	<p>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.</p>
<p>Pediatric Septic Shock</p>	<p>60</p>	<p>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.</p>
<p>Pediatric Toxic Ingestion (ALS)</p>	<p>120</p>	<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>
<p>Pediatric Toxic Ingestion (BLS)</p>	<p>120</p>	<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>

**Approved Courses by Pennsylvania Department of Health**

<p>Pediatric Transport</p>	<p>60</p>	<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>
<p>Personal Protective Equipment</p>	<p>90</p>	<p>This course consists of a 10-part training suite on personal protective equipment (PPE). In this course, you will learn about PPE standards outlined by OSHA and how employers determine PPE requirements. Topics discussed include PPE measures to protect the head, eye, face, hand, arm, body, foot, and leg. This course will also include hearing protection methods and respirator use to protect against inhalation hazards. This course will also include PPE recommendations to protect against electrical hazards and how to select appropriate PPE to provide adequate protection.</p>
<p>Pharmacology and Toxicology in EMS</p>	<p>30</p>	<p>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.</p>
<p>Planning for Mass Casualty and Trauma Triage</p>	<p>60</p>	<p>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.</p>
<p>Post Partum Emergencies</p>	<p>30</p>	<p>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.</p>

**Approved Courses by Pennsylvania Department of Health**

Pre-Hospital Fluid Resuscitation	60	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.
Preventing Sexual Harassment	60	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.
Preventing Slips, Trips, and Falls	60	Slips, trips and falls remain one of the most common causes of employee injury in the workplace. At best, slipping and tripping is embarrassing. Often, it leads to strains and sprains. At worst, it causes serious injury or even death. Preventing slips, trips and falls is fairly inexpensive and easy, but often ignored in the daily routine of trying to get work done quickly and efficiently. This course defines slips, trips and falls and details how you can avoid them. This course will also discuss how using the wrong equipment, or using the right equipment in the wrong way, can cause you to slip, trip and fall.
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.

**Approved Courses by Pennsylvania Department of Health**

<p>Protection Against Phishing Attacks</p>	<p>60</p>	<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>
<p>Protocols for Pediatric Field Termination of Resuscitation</p>	<p>60</p>	<p>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.</p>
<p>Pulmonary Embolism: The Silent Killer</p>	<p>60</p>	<p>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.</p>
<p>Refractory Cardiac Arrest: Partnering with Definitive Care</p>	<p>60</p>	<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>

## Approved Courses by Pennsylvania Department of Health

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.
Resolving Conflict in the Workplace	60	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.
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.
Respiratory Protection	30	A single exposure to an airborne chemical can cause health effects that may last for the rest of your life. If your workplace contains dangerous chemicals or hazardous atmospheres, you must know when and how to wear a respirator. This training will present the basic requirements of respiratory protection and focus on respirators' types and limitations.
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.

**Approved Courses by Pennsylvania Department of Health**

<p>Roadside Safety Issues</p>	<p>90</p>	<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>
<p>Scene Safety and Situational Awareness</p>	<p>60</p>	<p>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.</p>
<p>Street Drugs</p>	<p>60</p>	<p>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.</p>
<p>Supraglottic Airway Management</p>	<p>60</p>	<p>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.</p>



**Approved Courses by Pennsylvania Department of Health**

<p>Tackling Defensive and Distracted Driving</p>	<p>60</p>	<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>
<p>Tackling the Impossible Airway</p>	<p>60</p>	<p>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.</p>
<p>Technology and Quality Improvement in Cardiac Arrests</p>	<p>60</p>	<p>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. will describe the technologies, including metronomes and voice prompts, that were implemented and the results they achieved.</p>
<p>The Ketamine Challenge: Pros and Cons for EMS</p>	<p>60</p>	<p>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.</p>

**Approved Courses by Pennsylvania Department of Health**

Thinking Fast Acting Slow	30	<p>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.</p>
Toxic Chemical Handling and Exposure	150	<p>As first responders, you may be called to respond to an environment with a toxic chemical; you may or may not be aware of its presence initially. This course will discuss many toxic chemicals, such as hexavalent chromium, crystalline silica, flammable liquids, combustible liquids, benzene, arsenic, formaldehyde, asbestos, and lead. In each segment, you will learn about the risks of exposure, how to avoid exposure, relevant handling procedures, necessary PPE, and what to do if you are exposed.</p>
Transgender Patient Assessment and Care	60	<p>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.</p>
Trauma Management Skills	60	<p>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.</p>

**Approved Courses by Pennsylvania Department of Health**

<p>Trauma, Helmets, and Airway Management</p>	<p>60</p>	<p>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.</p>
<p>Treating Pediatric Patients (ALS)</p>	<p>60</p>	<p>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.</p>
<p>Treating Pediatric Patients (BLS)</p>	<p>60</p>	<p>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.</p>
<p>Treating Stroke Patients</p>	<p>60</p>	<p>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.</p>

**Approved Courses by Pennsylvania Department of Health**

<p>Trench Rescue: Excavation, Trenching, and Soil Mechanics</p>	<p>60</p>	<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>
<p>Violent Encounters in Healthcare</p>	<p>60</p>	<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>
<p>Walking the Patient</p>	<p>30</p>	<p>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>
<p>Workplace Communication Basics</p>	<p>60</p>	<p>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.</p>