

Essential Medical Training, LLC

“Providing Quality, Professional Training”



PARAMEDIC REFRESHER COURSE

48 hours of Continuing Education

This course is approved by the Florida Bureau of EMS for continuing education

Course Approval 20-576309

www.EssentialMedicalTraining.com

Table of Contents

Module 1- Introduction	1
Paramedic Health and Safety	1
Addictions.....	2
Legality: Consent	3
Resuscitation Issues.....	5
HIPPA Privacy Rules	8
Module 2- Respiratory.....	11
Anatomy of the Airway	11
Respirations and Ventilations	12
Respiratory Assessment	14
Basic Airway Management	17
Endotracheal Intubation (ET).....	20
Surgical Airways	25
Rapid Sequence Intubation (RSI).....	27
Continuous Positive Airway Pressure (CPAP)	29
Module III- Pharmacology	32
Drug Schedules.....	33
Medication Administration	35
Drug Routes.....	37
Nasal Administration.....	39
Nasogastric Administration.....	39
Intravenous Fluids	40
Intraosseous Infusion.....	41

Common Medications	45
Module IV- Electrocardiogram (ECG)	57
The Cardiac Cycle	57
Interpreting ECG	61
Basic Rhythms.....	62
Module V- Medical Emergencies	67
Allergies and Anaphylaxis	67
Diabetes	69
Seizures.....	71
Myocardial Infarction.....	73
Management of Bradycardia and Tachycardia	74
Module VI- Trauma Emergencies.....	81
Blast Injuries.....	86
Penetrating Injuries.....	89
Chest Wall Injuries	90
Infection Control and Blood Borne Pathogens	96
Common Infectious Diseases encountered by Paramedics/EMS Personnel	102
Post-Exposure Prophylaxis	106
Pediatric Emergencies (2-hours)	111
General Approach to Pediatric Assessment.....	111
Specific Respiratory Emergencies	118
Basic Airway Adjuncts.....	122
Shock Recognition and Management.....	125
Management of Shock.....	127

Basic Life Support.....	129
References	0

Module 1- Introduction

Paramedic Health and Safety

It is important that the paramedic maintains a state of wellness. It is important to learn about safe practices and apply these to your everyday life. This will allow the paramedic to have a long and safe career, avoid injuries and illnesses that can be associated with this field of work. Most paramedic injuries are due to improper lifting that occurs during awkward positions such as at a motor vehicle accident. Those who train to be physically fit reduce the chances of injuries that can force them into early retirement.

Exercise is important to cardiovascular health and muscular strength. These are important health items that can help the paramedic maintain a good state of health and help them perform better on the job. Exercise does not need to consist of intense training but can be intentional exercise that improves the overall health. Exercise will also improve flexibility that will help reduce chances of injuries.

Nutrition is important to maintaining health of the paramedic. Because we live a fast-paced routine when working, fast food has become the quick way of eating while on the go. This can lead to obesity and other medical issues from a poor diet. Creating a good eating routine from the beginning can prevent bad habits from forming that become hard to break later in life. The United States Department of Agriculture Food and Nutrition Services emphasis's that a healthy diet accounts for all foods and beverages.

A healthy eating plan includes:

- A variety of vegetables from all of the subgroups- dark green, red and orange, legumes (beans and peas), starchy, and other

- Fruits, especially whole fruits
- Fat-free or low-fat dairy, including milk, yogurt, cheese, and/or fortified soy beverage
- Grains, at least half of which are whole grains
- A variety of protein foods, including seafood, lean meats and poultry, eggs, legumes (beans and peas), and nuts, seeds, and soy products
- Oils

It is recommended that adults consume less than 10 percent of calories per day from added sugars and saturated fats. Sodium intake should be less than 2,300 milligrams per day. This information was updated in the 2015-2020 dietary guidelines. More information can be found at <http://www.fns.usda.gov/>.

Addictions

Individuals who work high-stressed jobs such as EMT's and Paramedics can be at risk for substance abuse. There have been very few studies on substance abuse in the EMS system but it is becoming an increasing problem. There have been many news media stories on paramedics who have been caught stealing medications from patient's homes while they were there treating them. There are cases where the EMT or Paramedic has been caught removing drugs such as morphine or fentanyl from a vial and replacing it with water or saline. Another unsuspecting paramedic administers this drug to a patient in which they will not get the desired affects because it is water or saline. This can be dangerous in a life-saving situation.

EMT's or Paramedics who are under the influence of a drug should be removed from service until an investigation and/or treatment is completed. Substance abuse refers to the harmful or hazardous use of

psychoactive substances, including alcohol and illicit drugs. Alcohol is the cause of over 200 diseases and injuries in adults. In 2008, 155 to 250 million people used psychoactive substance world-wide.

Globally, cannabis is the most commonly used drug followed by Amphetamine type stimulants.

Researchers have consistently found that members of the fire service drink more than the average adult. EMT's and Paramedics who witness traumatic scenes over and over will sometimes use alcohol or drugs as a way to cope with the reoccurring thoughts that play out in their minds. There are treatment programs available, specifically for first responders, which help them break their addiction to alcohol and drugs. These treatment programs also guide them to understanding how to deal with these post-traumatic events.

Legality: Consent

Abandonment

Abandonment- is the discontinuation of care without another healthcare provider assuming care of the patient with the same or greater level of training. Once you begin caring for a patient, you cannot discontinue without reason. If another healthcare provider is going to assume care of your patient, they must have an equal or greater level of training that you. Physically leaving your patient can be grounds for abandonment. Abandonment is the unilateral termination of healthcare provider/patient relationship when additional medical care is still needed. Abandonment can also be when a provider fails to respond to a call for help.

If a provider by the patient with a weapon and the provider retreated to safety. This would not be a case of abandonment because the provider was not able to continue providing care because of his/her safety. In this

type of situation, the EMT or Paramedic should escape to a safe environment as quickly as possible.

Assault and Battery

A provider who does not receive consent from the patient prior to treatment could be charged with assault and battery. Assault is the unlawful act of threatening a person and placing them in a state of fear. An example would be if a patient refused an IV but the paramedic held up an IV catheter as if he was going to use it on the patient. Assault may not result in physical touch or harm but it is the act of threatening.

Battery is the physical touching of a patient without their prior consent. An example would be the paramedic actually starting the IV on the patient without their consent to do so.

Paramedics can be sued for assault and battery in both civil and criminal courts.

False Imprisonment

If a paramedic was to transport a patient against their consent, this would be a case of false imprisonment. Paramedics must obtain the appropriate consent prior to transporting a patient. A patient must be competent in order to provide that consent. A paramedic who transports a patient against their will must have proper justification. An example would be a psychiatric patient or a patient who was possibly going to harm themselves. It is important to have law enforcement on scene to assist with these types of legal issues.

Paramedics who fail to obtain the appropriate consent prior to treatment could be charged with assault and battery. **Assault-** is the threat of carrying out an action whether successful or not. A paramedic who

threatens to start an IV without the consent of the patient could be charged with assault if the patient refuses the IV. Even if that paramedic did not touch the patient, the threat of being able to carry out the action is enough to charge the paramedic with assault. Paramedics charged with assault can be tried criminally and face jail time including a fine. They can also be sued civilly in court for mental distress that the victim endured.

If the EMT or paramedic actually touches the patient, they could be charged with battery. **Battery**- is the actual touching of a person without their consent. A paramedic who actually starts an IV on a patient who refuses any medical treatment could be charged with battery. EMT's and Paramedics can be held criminally and civilly liable for these charges.

Resuscitation Issues

Advanced Directives

Advanced directive is a written document that provides a detailed plan of the patient's wishes on future medical treatment should they become unconscious or unable to make informed decisions.

There are several types of advanced directives but some of the common are: Do Not Resuscitate (DNR), organ donor, power of attorney, and living wills. Many of these directives are governed by state laws that provide details on these requests. Some states do not allow paramedics to recognize certain advanced directives in the field. It is important that paramedics understand their state law and local protocol in advance.

Living Wills

A living will is a legal document that allows a person to choose specific medical treatments that they will receive in advance. These wishes are written in detail should the need arise and the patient is not able to make

decisions. Often paramedics are not able to honor living wills in the field, so it is important to know your state law and local protocols.

Do Not Resuscitate (DNR) Orders

DNR order is a legal document that allows healthcare providers to withhold life-saving resuscitation efforts in the event that a person's heart and respiratory functions stop. This choice is usually made by the patient in advance. In the State of Florida, the Florida Administrative Code (FAC) governs the DNR orders FAC 64J-2.018. The FAC requires that EMT's and Paramedics honor the DNR order provided the form is printed on yellow paper and is signed by the patient's physician. Prior to honoring the DNR, EMT's and paramedics must identify the patient of the DNR order with state recognized identification device such as a driver's license. A DNR order can be revoked at any time by one of the following: patient, patient's healthcare surrogate, proxy or court appointed guardian or person acting pursuant to durable power of attorney.



State of Florida DO NOT RESUSCITATE ORDER

(please use ink)

Patient's Full Legal Name: _____ Date: _____
(Print or Type Name)

PATIENT'S STATEMENT

Based upon informed consent, I, the undersigned, hereby direct that CPR be withheld or withdrawn.
(If not signed by patient, check applicable box):

- Surrogate
- Proxy (both as defined in Chapter 765, F.S.)
- Court appointed guardian
- Durable power of attorney (pursuant to Chapter 709, F.S.)

(Applicable Signature) (Print or Type Name)

PHYSICIAN'S STATEMENT

I, the undersigned, a physician licensed pursuant to Chapter 458 or 459, F.S., am the physician of the patient named above. I hereby direct the withholding or withdrawing of cardiopulmonary resuscitation (artificial ventilation, cardiac compression, endotracheal intubation and defibrillation) from the patient in the event of the patient's cardiac or respiratory arrest.

(Signature of Physician) (Date) Telephone Number (Emergency)

(Print or Type Name) (Physician's Medical License Number)

DH Form 1896, Revised December 2004

PHYSICIAN'S STATEMENT

I, the undersigned, a physician licensed pursuant to Chapter 458 or 459, F.S., am the physician of the patient named above. I hereby direct the withholding or withdrawing of cardiopulmonary resuscitation (artificial ventilation, cardiac compression, endotracheal intubation and defibrillation) from the patient in the event of the patient's cardiac or respiratory arrest.

(Signature of Physician) (Date) Telephone Number (Emergency)

(Print or Type Name) (Physician's Medical License Number)



State of Florida DO NOT RESUSCITATE ORDER

Patient's Full Legal Name (Print or Type) (Date)

PATIENT'S STATEMENT

Based upon informed consent, I, the undersigned, hereby direct that CPR be withheld or withdrawn.
(If not signed by patient, check applicable box):

- Surrogate
- Proxy (both as defined in Chapter 765, F.S.)
- Court appointed guardian
- Durable power of attorney (pursuant to Chapter 709, F.S.)

(Applicable Signature) (Print or Type Name)

DH Form 1896, Revised December 2004