

# **Emergency Medical Dispatch with TCPR Certification**

This course provides an in-depth review of the components of Emergency Medical Dispatch (EMD) and Telecommunicator CPR (TCPR). It gives telecommunicators the tools they need to quickly and accurately determine the caller's medical emergency, dispatch emergency medical responders and provide the caller with the appropriate Pre-Arrival Instructions.

## Goals

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Upon completion of this course, the student will be able to demonstrate the following skills.

- 1. Quickly and accurately assess the caller's medical emergency.
- 2. Describe the basic systems of the human body.
- 3. Recognize the signs and symptoms of a caller who may be in respiratory distress.
- 4. Recognize when a traumatic incident has occurred and offer the caller appropriate Pre-Arrival Instructions for their type of emergency.
- 5. Identify the signs and symptoms of cardiac arrest.
- 6. Explain the importance of TCPR and why it is critical to improving patient outcomes from cardiac arrest.
- 7. Discuss the specifics of hands-only CPR and how to get maximum benefit from chest compressions.
- 8. Discuss the medical emergencies that require ventilation in addition to chest compressions.
- 9. Explain how to access and integrate an Automated External Defibrillator as part of high-quality CPR.
- 10. State the levels of consciousness.
- 11. Identify the stages of pregnancy in order to assess risk to mother or baby.
- 12. Understand why environmental conditions which are excessively hot or cold create potentially life-threatening situations.

# **Overview**

- Module 1 Anatomy & Physiology
- Module 2 Respiratory Incidents
- Module 3 Physical Trauma Incidents
- Module 4 Cardiac Incidents





- Module 5 How to Recognize the Need for CPR
- Module 6 Mechanics of Hands-Only CPR
- Module 7 Rescue Breathing
- Module 8 Using an Automated External Defibrillator (AED)
- Module 9 Altered Levels of Consciousness and Causes
- Module 10 Childbirth
- Module 11 Cold and Heat Exposure
- Module 12 Conclusion
- Final Quiz

# Modules

#### Module 1: Anatomy and Physiology

This module provides an introductory look at human anatomy and physiology to provide you with a basic understanding of the structures and functions of the body.

Upon completion of this module, the student will be able to demonstrate the following skills.

- 1. Quickly and accurately assess the caller's medical emergency.
- 2. Describe the basic systems of the human body.
- 3. Recognize the signs and symptoms of a caller who may be in respiratory distress.

## Module 2: Respiratory Incidents

This module explores a variety of respiratory incidents and describes how the telecommunicator can support the caller with Pre-Arrival Instructions.

- 1. Recognize the signs and symptoms of a caller who may be in respiratory distress.
- 2. Provide instructions to aid choking victims.
- 3. Recognize opioid induced breathing problems.
- 4. Support the caller in administering Naloxone.
- 5. Recognize the signs of anaphylaxis.
- 6. Support the caller in administering an EpiPen.





#### Module 3: Physical Trauma Incidents

This module explores several types of physical traumatic incidents: broken bones, burns and bleeding.

Upon completion of this module, the student will be able to demonstrate the following skills.

- 1. Recognize when a physical traumatic incident has occurred and offer the caller appropriate Pre-Arrival Instructions for their type of emergency.
- 2. Explain the differences between simple and compound fractures.
- 3. State the differences between first degree burns and all higher severity burns.
- 4. Provide appropriate Pre-Arrival Instructions for each of the four categories of burns to burn victims.
- 5. Use the Rule of Nines for adults and children to inform responders about a victim's burn severity.
- 6. Explain the difference between internal and external bleeding.
- 7. Provide appropriate Pre-Arrival Instructions for external bleeding incidents.
- 8. Explain why it is necessary to determine if bleeding victims are taking blood thinners.

#### Module 4: Cardiac Incidents

This module discusses the conditions that are a result of heart disease and loss of blood flow to the heart.

- 1. Discuss the medical conditions that are associated with heart disease.
- 2. Describe the cardiac emergencies that occur as a result of heart disease.
- 3. Explain what happens to the body when the heart stops.
- 4. identify the signs and symptoms of cardiac arrest.
- 5. Describe the type of cardiac events that require CPR.





### Module 5: How to Recognize the Need for CPR

This module provides an overview of Telecommunicator CPR or TCPR, and the vital role it plays in improving outcomes for patients in cardiac arrest.

Upon completion of this module, the student will be able to demonstrate the following skills.

- 1. Explain the importance of TCPR and why it is critical to improving patient outcomes from cardiac arrest.
- 2. Describe the actions and performance metrics that characterize high-quality CPR.
- 3. Discuss the critical role the telecommunicator plays in quickly identifying cardiac arrest and coaching the caller to perform high-quality CPR.

#### Module 6: The Mechanics of Hands-Only CPR

This module examines the features of high-quality chest compressions including the optimal positioning for callers and patients to maximize the benefits.

Upon completion of this module, the student will be able to demonstrate the following skills.

- 1. Describe the performance standards established by the American Heart Association for consistent, high-quality CPR.
- 2. Discuss the specifics of hands-only CPR, and how to get maximum benefit from chest compressions until responders arrive at the scene with oxygen and defibrillation.
- 3. Explain the best position for the patient and caller during chest compressions to promote blood flow.
- 4. Identify the CPR protocols that are in place for special populations including children and infants.

#### Module 7: Rescue Breathing

This module explores the cardiac events and patient populations that require the delivery of high-quality rescue breaths, and how to coach the caller to properly provide them when necessary.





- 1. Identify the mechanics of conventional CPR.
- 2. Discuss the medical emergencies that require ventilation in addition to chest compressions.
- 3. Identify how to best coach callers to deliver high-quality rescue breaths.
- 4. Describe the adaptations that must be made when delivering breaths to infants.

#### Module 8: The Role of AEDs

This module examines the functionality of an AED, its availability during an emergency cardiac event and how it is used in conjunction with the other components of CPR.

Upon completion of this module, the student will be able to demonstrate the following skills.

- 1. Describe the important role AEDs play in successful patient outcomes from sudden cardiac arrest.
- 2. Discuss how an AED works to re-establish a healthy heart rhythm, and where AEDs are typically located.
- 3. Explain how to best coach the caller to access and integrate an AED as part of highquality CPR.

#### Module 9: Altered Mental Status

In this module, we explore several incident types where the victim may be unconscious, or not mentally alert, due to an underlying medical condition.

Upon completion of this module, the student will be able to demonstrate the following skills.

- 1. State the levels of consciousness.
- 2. Recognize callers that may be experiencing a diabetic incident and provide proper Pre-Arrival Instructions.
- 3. Recognize the symptoms of stroke in both senior and young adult victims.
- 4. Respond to stroke victims FAST.
- 5. State several causes for why people faint.
- 6. Explain why shock occurs and how it affects victims.
- 7. Identify the signs of shock.
- 8. Support victims that are susceptible to shock, or are experiencing shock, with Pre-Arrival Instructions.

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# Module 10: Childbirth

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This module discusses how to recognize normal and irregular deliveries, and how to support the caller through the delivery process should they be unable to reach medical assistance before the birth.

Upon completion of this module, the student will be able to demonstrate the following skills.

- 1. Identify the stages of pregnancy to assess risk to mother or baby.
- 2. Describe the three stages of labor.
- 3. Identify the signs that childbirth is imminent for a pregnant woman.
- 4. Support a caller who may be in the early stages of labor with Pre-Arrival Instructions.
- 5. Recognize the signs of normal and irregular delivery presentations.
- 6. Assist a caller with the delivery of a baby prior to responders' arrival.

#### Module 11: Environmental Incidents

This module discusses the effects that extreme hot and cold temperatures can have on the body and the problems they may cause for callers subjected to harsh environments.

- 1. Understand why environmental conditions which are excessively hot or cold create potentially life-threatening situations.
- 2. Recognize the signs of the following conditions and provide Pre-Arrival Instructions to callers for each of the following: frostbite, hypothermia, heat exhaustion and heat stroke.





# Requirements

This self-paced, online course is part of an ongoing effort by PowerPhone to provide timely and essential learning to telecommunicators on new advisories and procedures important to the PSAP community. After completing all sections of this class, you will need to score a minimum of 75% on the final quiz to earn 24.0 CEUs.

- Desktop, laptop or mobile device
- Speakers / Headphones
- High-speed Internet access
- Internet Browser (Google Chrome preferred)