EMS Operations
OBJECTIVES

38.1 Recognize the four types of ambulances currently specified by the US Department of Transportation. Slide 15

38.2 Describe the types of equipment required to be carried by EMS response units. Slide 16

continued
OBJECTIVES

38.3 Describe the components of the vehicle and equipment checks done at the start of every shift. Slides 17–18

38.4 Describe the roles and responsibilities of the Emergency Medical Dispatcher. Slide 21

continued
OBJECTIVES

38.5 Discuss the principles of safe ambulance operation while responding to the scene. Slide 22

38.6 Explain laws that typically apply to ambulance operations. Slide 22

38.7 Discuss how to maintain safety at highway incidents. Slides 23–24

continued
OBJECTIVES

38.8 Describe the steps necessary for transferring the patient to the ambulance. Slides 26–29

38.9 Describe the EMT’s responsibilities while transporting a patient to the hospital. Slides 30, 32–34

continued
38.10 Describe the EMT’s responsibilities when transferring care of patients to the emergency department staff. Slides 36–37

continued
OBJECTIVES

38.11 Describe the EMT’s responsibilities in terminating the call and readying the vehicle for the next response after a call and returning to quarters. Slides 39–41
38.12 Identify when and how to call for air rescue, how to set up a landing zone, and how to approach a helicopter when assisting with an air rescue. Slides 45–47
MULTIMEDIA

- Slide 42  Sanitation—Medical Assistant Video
- Slide 43  Information About Body Substance Isolation and Equipment Video
CORE CONCEPTS

- Phases of an ambulance call
- Preparation for a call
- Operating an ambulance
- Transferring and transporting the patient
- Transferring the patient to the emergency department staff

continued
CORE CONCEPTS

- Terminating the call, replacing and exchanging equipment, cleaning and disinfecting the unit and equipment
- When and how to use air rescue
Topics

• Preparing for the Ambulance Call
• Receiving and Responding to a Call
• Transferring the Patient to the Ambulance
• Transporting the Patient to the Hospital
Topics

- Transferring the Patient to the Emergency Department Staff
- Terminating the Call
- Air Rescue
Preparing for the Ambulance Call
Preparing for the Call

Type 1 Ambulance

Type 2 Ambulance

Type 3 Ambulance

Type 4 Ambulance
Ambulance Supplies and Equipment

• Learn where each item is, what it is for, and when it should be used

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Ensuring Readiness for Service

- Make sure vehicle and equipment are ready for use at beginning of every shift
Ensuring Ambulance Readiness for Service

- Ambulance inspection, engine off
- Ambulance inspection, engine on
- Inspection of patient compartment supplies and equipment

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Think About It

• As I walk around the vehicle (engine-on and engine-off check), what information do I get from what I hear, see, and smell?
Receiving and Responding to a Call
Receiving and Responding to a Call

• Emergency Medical Dispatcher
  – Interrogate caller and assign priority to call
  – Provide pre-arrival medical instructions to callers and information to crews
  – Dispatch and coordinate EMS resources
  – Coordinate with other public safety agencies
Operating the Ambulance

- Safe operation
- Understand the law
- Use warning devices
- Speed and safety
- Escorted or multiple-vehicle responses
- Respond safely
Highway Safety

- Keep unnecessary units and people off highway
- Avoid crossovers unless turn can be completed without obstructing traffic

* Utilize vehicle warning lights
* Set the emergency brake
* Shut off headlights — unless they are needed to illuminate the scene

continued
Highway Safety

- Wear all PPE
- Place cones/flares and reduce emergency lighting
- Unit placement is important
Transferring the Patient to the Ambulance
Four Steps of Transferring

- Select proper patient-carrying device
- Package patient for transfer
- Move patient to ambulance
- Load patient into ambulance
Packaging the Patient

- Readying patient to be moved and combining patient and patient-carrying device as unit ready for transfer
- Sick or injured patient must be packaged so that condition is not aggravated
Packaging the Patient

• Before placing patient on carrying device
  – Complete necessary care for wounds, other injuries
  – Stabilize impaled objects
  – Check dressings and splints
• Cover patient and secure to patient-carrying device
Protecting the Patient

• Must be secured to patient-carrying device
• Minimum of three straps to secure
  – Chest level, waist level, lower extremities
• Use shoulder harness if available
Protecting the EMT

- EMT at greater risk in patient compartment
- Make sure all equipment is secured
- Remain seated
- Wear seat belt and harness if possible
- Avoid unnecessary movement during response and transport
Transporting the Patient to the Hospital
Preparing Patient for Transport to Hospital

- Continue assessment
- Secure stretcher in place in ambulance
- Position and secure patient
- Adjust security straps

continued
Preparing Patient for Transport to Hospital

- Prepare for respiratory and cardiac complications
- Loosen constricting clothing
- Load personal effects
- Talk to the patient
Caring for Patient En Route to Hospital

- Notify hospital
- Continue to provide emergency care as required
- Use safe practices during transport
- Compile additional patient information
Transferring the Patient to the Emergency Department Staff
Transferring Patient to Emergency Department

- If routine admission or non-life-threatening injury, check what is to be done with patient
- Assist emergency department staff, provide verbal report
Transferring Patient to Emergency Department

- As soon as free from patient care, prepare prehospital care report
- Transfer patient’s personal effects
- Obtain your release from hospital
Terminating the Call
Terminating the Call: At the Hospital

- Clean patient compartment
- Prepare equipment for service
- Replace expendable items
- Exchange equipment according to local policy
- Make up ambulance cot
Terminating the Call: En Route to Quarters

- Radio dispatch with your status
- Air out ambulance if necessary for odor control
- Refuel ambulance
Terminating the Call: In Quarters

- Place badly contaminated linens in biohazard containers
- Clean equipment
- Disinfect non-disposable equipment
Sanitation—Medical Assistant Video

Click here to view a video on the subject of sanitization and equipment disinfection.
Information About Body Substance Isolation and Equipment Video

Click [here](#) to view a video on the subject of body substance isolation.
Air Rescue
When to Call for Air Rescue

• Operational reasons
  – Speeding transport to distant trauma center

• Medical reasons
  – High priority patients requiring advanced care or procedures not available at local hospital
Information to Give When Calling for Air Rescue

- Name and call-back number
- Agency name
- Nature of situation
- Exact location (crossroads, major landmarks)
- Exact location and description of landing zone
Landing Zone

- Setting up landing zone
- Approaching helicopter
Chapter Review
Chapter Review

• Inspect the vehicle to assure that it is complete and that critical items can be easily located.

• The laws in most states allow the driver of an emergency vehicle running “hot” to break some of the vehicle and traffic laws; however it must be done with due regard.
Chapter Review

- Pay attention to driving.
- Secure all gear.
- Always wear your seat belt.
- Know the medical and operational reasons for helicopter transport and know how to set up a safe landing zone.
Remember

- Ambulances must be properly stocked and prepared. Pre-call inspections assure readiness and appropriate equipment.
- Emergency Medical Dispatchers enhance patient care by providing pre-arrival instructions and by obtaining information for responders.

continued
Remember

• Each state has statutes regulating operation of emergency vehicles. EMTs must be familiar with local rules and regulations.

• EMTs should use good judgment and due regard for safety of others when operating an ambulance.

continued
Remember

- The four steps involved in transferring the patient to the ambulance are selecting proper patient-carrying device, packaging patient for transfer, moving patient to ambulance, and loading patient into ambulance.
Remember

• Patients should be safely secured prior to the ambulance’s moving. Assessment and care must continue during transport.
• The primary concern of transfer of care is continuation of patient care. Failure to do so properly can be considered abandonment.
Remember

• Cleaning the ambulance, replacing used supplies and equipment, and readying the ambulance stretcher are important elements the EMT must complete while terminating a call. However, EMTs should be prepared for unusual circumstances.
Remember

- Indications for utilizing air rescue may include both operational and medical reasons. EMTs should be familiar with local protocols for accessing and utilizing air rescue transport.
Questions to Consider

• Does the patient have a true emergency adversely affected by time?
• How can I park to best protect the scene and personnel?
• Does my personal protective equipment “match” what is being worn by others?
Critical Thinking

- What equipment should you include in a kit that you carry to the scene?
- How should the equipment be positioned so that you can reach urgently needed items quickly?
- What special items, if any, should be in the kit to meet local needs?
Please visit Resource Central on [www.bradybooks.com](http://www.bradybooks.com) to view additional resources for this text.