

# **EMS Operations**

- Be prepared to respond with the proper equipment.
- Know simple extrication procedures and the basics of air medical response.
- Understand the purpose of the incident management system and NIMS.
- Understand basic triage and the START system.

## **Preparing for a Call**

- Be prepared to respond promptly.
- Use the most direct route.
- Have the proper equipment to perform your job.
  - Equipment must be stocked and maintained on a regular basis.

## **First Responder Life Support Kit**

- Patient examination equipment

- Personal safety equipment
- Resuscitation equipment
- Bandaging and dressing equipment
- Patient immobilization equipment
- Extrication equipment
- Miscellaneous equipment

## **First Responder Life Support Kit**

### **Five Phases of Response**

- Dispatch
- Response to scene
- Arrival at scene
- Transferring patient care to other EMS personnel
- Postrun activities

### **Dispatch**

- Dispatch facility
  - The center that citizens call to request emergency medical care
- Most centers are part of a 9-1-1 system that dispatches for fire, police, and EMS.

# Dispatch

- Information from dispatch should include:
  - Nature of the call
  - Name and location of patient
  - Number of patients
  - Any special problems
  - Call-back number from the caller

## Response to the Scene

- Get there quickly and safely.
- Follow safety procedures
  - Use seatbelts.
  - Proper use of vehicle warning devices
  - Drive so you are not involved in an accident.

## Arrival at the Scene

- Place your vehicle in a safe location.
- Use your vehicle warning lights.
- Consider scene safety.
- Determine if additional help is needed.
- Follow the patient assessment sequence.

## Transferring Patient Care

- Transfer care to more highly trained personnel.
- Give brief report.
- Offer assistance.

## **Postrun Activities**

- Complete necessary paperwork.
- Clean equipment.
- Replace supplies.
- Notify dispatch when you are ready for another call.

## **Helicopter Operations**

- Helicopters are used to reach patients in inaccessible areas.
- Obtain a copy of the ground operations procedure.
- Schedule an orientation session.

## **Helicopter Safety Guidelines**

- Main rotor may be just 4 feet from the ground.

- Tail rotor may be invisible.
- Rotors can generate a “wash” equivalent to winds of 60–80 mph.

## **Setting Up Landing Zones**

- Landing zone should be flat and free of debris.
- Check carefully for nearby wires.
- Zone should be at least 100 feet x 100 feet.

## **Loading Patients into Helicopters**

- Secure all loose clothing, sheets, and instruments.
- Use eye protection.
- Approach from the front.
- Follow the helicopter crew’s instructions.

## **Approaching Helicopters Extrication**

- Simple techniques to access, treat, and extricate patients who are trapped in

vehicles

- Primary goals for first responders:
  - Obtain safe access to patients.
  - Ensure patient stabilization.

## **Extrication**

- Know your limitations.
- Identify hazards.
- Control hazards if trained.
- Gain access to patients.
- Provide patient care and stabilization.
- Move patients only if necessary.

## **7 Steps of Extrication**

- Conduct overview of scene.
- Stabilize scene; control hazards.
- Gain access to patients.
- Provide initial emergency care.
- Help disentangle patients.
- Help prepare patients for removal.
- Help remove patients.

## **Overview of the Scene**

- Anticipate and plan for what you might

find.

- Overview the scene before exiting your vehicle.
- Determine
  - Extent of incident
  - Number of patients
  - If any hazards exist
- Call for assistance.

## **Overview of the Scene**

As you approach an accident, look over the entire scene.

## **Stabilize Scene and Hazards**

- Infectious diseases
- Traffic hazards
- Bystanders
- Spilled gasoline
- Automobile batteries
- Downed electrical wires
- Unstable vehicles
- Vehicle fires

# Hazards

A single accident scene may contain many hazards.

## Hazards

- Infectious diseases
  - Follow BSI precautions.
  - Wear heavy rescue gloves.
- Traffic hazards
  - Park vehicles so they protect the scene and warn other motorists.

## Hazards

- Bystanders
  - Give specific directions about where they should move to.
- Spilled gasoline
  - Call fire department.
  - Consider covering with dirt.

## Hazards

- Automobile batteries
  - Turn off vehicle's ignition to reduce possibility of electrical short circuit.

- Downed electrical wires
  - Locate wires but avoid contact.
  - Keep trapped persons inside vehicle and all bystanders away from scene.

## **Hazards**

- Unstable vehicles
  - On their wheels
  - On their sides or upside-down
- Vehicle fires
  - Use dry chemical fire extinguisher.
  - Remove patients as quickly as possible.

## **Gain Access to Patients**

- Access through doors
  - Always try doors first!
  - Start with least damaged door.

## **Gain Access to Patients**

- Access through windows
  - Break side windows rather than windshield.
  - Wear proper safety equipment.

# **Provide Initial Emergency Care**

- Conduct a patient assessment.
  - Monitor ABCs.
  - Control bleeding.
  - Treat for shock.
  - Stabilize cervical spine.

# **Provide Initial Emergency Care**

- Provide psychological reassurance.
- Maintain patient's body temperature.
- Leave the patient in vehicle unless in immediate danger.
- Keep patients stabilized and immobilized until properly packaged and removed.

# **Assist With Patient Removal**

- Help disentangle patients.
- Help prepare patients for removal.
  - Access route may not be large

enough for extrication.

- Help remove patients.

## **The Golden Hour**

- The less time spent on scene with a seriously injured patient, the better.
- Chance for survival increases if rescuers get the patient to a trauma center within 1 hour of injury.

## **Review of the Extrication Process**

- Call for help.
- Specify types of vehicles involved.
- Identify and contain hazards.
- Park your vehicle so headlights and warning lights can be used to protect scene.

## **Review of the Extrication Process**

- Clear a working area around the accident.

- Remember to try opening the doors first.
- Once you gain access, assess and monitor patients.
- Keep your cool!

## **HazMat Incidents**

- Your first priority is to protect yourself.
- The most important step is to identify the substance.
- Unless you have received training, you should keep away from the hot zone.
- Wait for the help of trained personnel.

## **HazMat Incidents**

- Patients with HazMat injuries
  - Very few specific antidotes or treatments
  - Emergency treatment usually aimed at supportive care
  - Constantly evaluate patient's vital signs.

## **Multiple-Casualty Incidents**

- **Multiple-casualty incidents:** Situations

with more than one sick or injured individual

- Provide the greatest medical benefit for the greatest number of people.
- **Triage:** Sorting of patients into groups according to their need for treatment
  - Should be simple and fast

## **Visual Survey**

- Prepare yourself mentally and force yourself to stay calm.
- Visually assess:
  - Number of patients
  - Severity of injuries
  - How much help is needed

## **Initial Radio Report**

- Location of incident
- Type of incident
- Hazards
- Approximate number of victims
- Type of assistance needed
- Be as specific as possible.

# Sorting Patients

- Do not become involved in treating the first or second patient you see.
- Triage
  - Get to each patient quickly.
  - Conduct rapid assessment.
- Do not stop except to correct airway and severe bleeding problems.

## START System

- Simple Triage And Rapid Treatment
- Based on breathing, circulation, and mental status (BCM)
- Designed to help identify the most seriously injured patients

## Four Colors of Triage

- **Priority One (Red tag):** Immediate care/life threatening
- **Priority Two (Yellow tag):** Urgent care/can delay up

- to 1 hour
- **Priority Three (Green tag):** Delayed care/can delay up to 3 hours
- **Priority Four (Gray/Black tag):** Patient is dead/no care required.

## **Triage Tags START Steps Working at Mass-Casualty Incidents**

- Report to incident commander (IC).
- IC will assign you an area.
- Effective incident command system (ICS) depends on integrated, agreed-upon protocols and procedures.
  - Learn the ICS used in your area.

## **National Incident Management System**

- Developed by U.S. Department of Homeland Security

- Provides a consistent and unified approach to handling emergency incidents

## **National Incident Management System**

- Role of first responder falls into Command and Management area.
- Federal government requires many agencies to utilize NIMS.
  - You may be required to be trained.