Chapter 23

Multiple Casualty Incidents

♦ KNOWLEDGE OBJECTIVES

1. List at least five examples of multiple casualty incidents (MCIs).
2. Describe how the incident command system (ICS) is used to effectively deal with multiple casualty incidents.
3. Describe at least four advantages of using the incident command system.
4. Explain the purpose of triage.
5. Describe how to use the START system.
6. Define the key terms for this chapter.

♦ SKILL OBJECTIVES

After reading this chapter and completing the class activities, you should be able to

1. Make appropriate decisions about care when given an example of a multiple casualty incident, including classifying injuries in terms of triage priorities.
♦ OUTLINE

Introduction 391
Multiple Casualty Incidents 391
  Organizing Resources 391

♦ KEY POINTS

Advantages of ICS

♦ Use of common terms. One big "boss."
♦ Unified command structure.
♦ Integrated communications system.
♦ Small, easily managed units.

START Assessment

♦ Breathing.
♦ Radial pulse.
♦ Level of consciousness.

♦ LEARNING ACTIVITIES

Matching

Match each term with its definition. Write its letter on the line in front of the definition.

Terms

a. Incident command system
b. Multiple casualty incident
c. START system

Definitions

1. _____An injury/illness situation with two or more casualties
2. _____A system to manage resources at the scene of an emergency
3. _____A system to quickly assess and prioritize medical care needs
**Short Answer**

Read each statement or question and write the correct answer or answers in the space provided.

1. List at least five examples of MCIs.
   1. ____________________________
   2. ____________________________
   3. ____________________________
   4. ____________________________
   5. ____________________________

2. Which three functions are checked in the START process?
   1. ____________________________
   2. ____________________________
   3. ____________________________

3. List at least four of the advantages of the ICS.
   1. ____________________________
   2. ____________________________
   3. ____________________________
   4. ____________________________

4. Describe the advantage of using a triage process.
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________
   ____________________________________________________________

♦ **CASE STUDY**

Read the case study below and answer the questions that follow.

**Case 23.1**

You are the first trained responder to arrive at the scene of a tornado in a residential area. Several homes have been levelled. You go to one of the flattened houses to see if there are any casualties.

The first person you come upon is an elderly man lying on his back, his legs and abdomen pinned under debris. He is conscious and complaining of numbness in his legs. He is breathing at a rate of 20 breaths per minute.

1. How should this person be categorized?
   a. Immediate care (red)
   b. Delayed care (yellow)
   c. Walking wounded
   d. Dead/nonsalvageable (gray/black).

You hear a young child crying for help. Upon searching, you find a two-year-old girl. Next to the child is a woman who is lying facedown, motionless. You determine the woman is not breathing. You clean her mouth and see that her airway is open. She is still not breathing.
2. What do you do next?
   a. Call for assistance from other rescuers.
   b. Give her 2 rescue breaths, and check her carotid pulse.
   c. Place a black or gray tag on the woman's wrist, and begin assessing the child.
   d. Move her rapidly to an ambulance for transport to the hospital.

3. As you assess the child, you find that she is breathing at a rate of 28 times per minute and has a good radial pulse. She tells you her name is Tracy. She has several cuts and bruises on her arms and legs. How should this child be categorized?
   a. Red
   b. Yellow or green
   c. Walking wounded
   d. Black or gray

You are summoned to a nearby man who is moaning. When you arrive, the man is breathing at a rate of 24 times per minute, but does not seem to have a pulse in either arm.

4. What would you do next?
   a. Check his level of consciousness.
   b. Place a red colour code on his wrist.
   c. Place a yellow colour code on his wrist.
   d. Search for and control any severe bleeding.

5. You continue to find many more casualties. Which group of casualties would you direct to go to a nearby landmark, such as a ball field, for further evaluation by medical personnel?
   a. "Immediate care" casualties
   b. "Delayed care" casualties
   c. "Nonsalvageable" casualties
   d. "Walking wounded" casualties
♦ SELF-ASSESSMENT

Circle the letter of the best answer.

1. In which of the following circumstances would it be appropriate to use triage?
   a. You are caring for a casualty with several severe injuries.
   b. Your squad of five responders is called to the scene of an auto crash involving four casualties.
   c. You are the first trained responder on the scene of a structure collapse at a day care centre.
   d. All of the above.

2. The incident command system concept can best be described as
   a. An organized group of people working together to attain a common goal.
   b. A formal, written chain of command.
   c. A description of individual scopes of responsibility and authority.
   d. Job descriptions of four leadership positions.

3. In using the START system, your first step is to
   a. Approach the scene, and find all casualties.
   b. Make the scene safe for the first responders.
   c. Clear the area of all casualties with only minor problems.
   d. Survey the scene to determine the magnitude of the emergency.

4. Which of the following is an advantage of the incident command system?
   a. Provides one unified command structure
   b. Assures an integrated communication system
   c. Has easily managed units of care providers
   d. All of the above

5. The first trained responder to arrive at the scene of a multiple casualty incident functions as the commander until
   a. A responder more experienced in handling MCIs arrives.
   b. The last casualty is triaged and evacuated from the MCI scene.
   c. The dispatcher designates another responder to assume command.
   d. A higher-ranking law enforcement officer takes control of the scene.
6. Using START, what should you do if a casualty still is not breathing after you have cleared the mouth and made sure that the airway is open?
   a. Check the pulse.
   b. Start rescue breathing.
   c. Place a red colour code on the wrist.
   d. Place a gray or black colour code on the wrist.

9. Which of the following situation(s) could be a multiple casualty incident?
   a. Explosion
   b. Fire
   c. Airliner crash
   d. All of the above

10. When is the triage process used?
    a. When you have a casualty with multiple injuries.
    b. Any time the casualties outnumber the rescuers.
    c. When all casualties are under the age of 12.
    d. All of the above.

11. Which colour triage tag would you use to identify a casualty who is breathing at a rate of 22 times per minute, has a strong radial pulse, and responds only to painful stimuli?
    a. Red.
    b. Yellow.
    c. Green.
    d. Grey/Black.
12. In the START system, the emergency care you give during the triage process should be limited to
   a. Controlling bleeding and delivering CPR.
   b. Opening the airway and controlling severe bleeding.
   c. Maintaining body temperature and administering oxygen.
   d. Clearing the airway and immobilizing possible spinal injuries.

13. When is the triage process used?
   a. When you have a casualty with multiple injuries.
   b. When the casualty's wounds are very serious.
   c. When all casualties are under the age of 12.
   d. Any time the casualties outnumber the rescuers.

14. In using the START system, your first step is to
   a. Locate all casualties.
   b. Make the scene safe to work.
   c. Clear the area of all casualties with only minor problems.
   d. Survey the scene to determine the magnitude of the emergency.

15. Using the START system, what should you do if a casualty still is not breathing after you have cleared the mouth and made sure that the airway is open?
   a. Check the pulse.
   b. Start rescue breathing.
   c. Place a red colour code on the wrist.
   d. Place a gray or black colour code on the wrist.
Answers to Exercises
Unit 23-Multiple Casualty Incidents

Matching:
1. b (pg. 390)
2. a (pg. 390)
3. c. (pg. 390)

Short Answer:
1. Earthquake; Tornado; Hurricane; Flood; Fire; Explosion; structure collapse; train derailment; airline crash; hazardous materials incident. (pg. 391)
2. Breathing; Circulation; level of consciousness. (pg. 395)
3. Terms commonly understood by those taking part; one "boss" with absolute authority to do what is necessary to accomplish the goal; one unified command structure with well-established divisions, all working to accomplish the same goal; an integrated communication system; easily managed units normally consisting of not more than four people. (pg. 392)
4. The advantage of the triage process is to be able to identify which casualties in a multiple casualty incident require urgent care so that they are treated according to the severity of their injuries and illnesses. (pg. 393)

Case Study 23.1:
1. b (pg. 395)
2. c (pg. 395)
3. b (pg. 395)
4. d (pg. 395)
5. d. (pg. 394)

Self-Assessment:
1. c (pg. 391)
2. a (pg. 392)
3. c (pg. 394)
4. d (pg. 392)
5. a (pg. 392)
6. d (pg. 395)
7. c (pg. 393)
8. a (pg. 395)
9. d. (pg. 391)
10. b. (pg. 394)
11. a. (pg. 397)
12. b. (pg. 395)
13. d. (pg. ??)
14. b. (pg. ??)
15. d. (pg. ??)