UNIT 3

Types of Injuries

(20 minutes)

PURPOSE: To help coaches learn how to recognize the main types of acute and chronic injuries.

LEARNING OBJECTIVES

In this unit, coaches will learn

- how most injuries occur,
- what distinguishes acute and chronic injuries, and
- how to recognize the main types of acute and chronic injuries.

MATERIALS NEEDED

- Sport First Aid Classroom Instructor DVD
- DVD player and monitor
- Pencil or pen for each coach

Unit Overview

Topic	Activities	Time (minutes)
A. Unit Introduction	Introduce the unit's purpose, objectives, and agenda.	1
B. Types of Injuries and How They Occur	Play DVD segment 2, "Types of Injuries and How They Occur." Coaches fill out a table while watching the DVD segment.	9
C. Injury Causes	In teams, coaches complete mechanisms (injury causes) columns in a table. Award points for correct answers.	9
D. Unit Summary	Summarize key unit points and answer coaches' questions.	1

UNIT CONTENT

A Unit Introduction (1 minute)

REFER coaches to the Unit 3 Learning Objectives and Unit Overview, page 9, in the *Sport First Aid Classroom Study Guide.*

INTRODUCE unit 3.

In unit 3, we'll discuss how to recognize the main types of acute and chronic injuries.

- We'll watch a DVD segment that covers
  - causes of injury,
  - acute injuries, and
  - chronic injuries.
- We'll do an activity in which you learn to identify causes of injury.

B Types of Injuries and How They Occur (9 minutes)

Activity 3.1 Types of Injuries

REFER coaches to Activity 3.1 Types of Injuries, page 10, in the *Sport First Aid Classroom Study Guide.*

INTRODUCE the activity.

Knowing how an injury occurred and whether it occurred suddenly or over time may help you to correctly identify an injury and respond with appropriate first aid care. In this activity, you'll fill out a table as we watch a DVD segment.

REVIEW the activity resources.

You'll use the table, Examples of Injuries That Affect Specific Body Tissues, that follows the activity instructions and activity outcome in the study guide.

EXPLAIN the activity instructions.

1. Work individually.
2. As you watch the DVD segment, listen for
    a. what types of injuries affect different body tissues and
    b. whether an injury is acute or chronic.
3. Fill in the table as you watch the DVD segment.
    a. In the second column, write the types of injuries that can affect each body tissue. For example, you'll hear on the DVD segment that bones can sustain closed fractures, so you would write *Closed fracture* in the second column.
    b. In the third column,
        - write *Acute* if the injury occurs suddenly and is the result of a specific injury mechanism,
        - write *Chronic* if the injury develops over a period of several weeks and is typically caused by repeated injury, or
        - write *Acute or Chronic* if both could be the case.

For example, bones can sustain closed fractures. Closed fractures occur suddenly, so you would

write *Acute* in the third column. As you can see, the answers for this injury have been provided in the table as an example.

EXPLAIN the activity outcome.

When you're done, you should have completed the "Injury" and "Type of injury" columns in the table. We'll review the activity outcome after watching the DVD segment.

ASK for questions about the activity.

PLAY DVD segment 2, "Types of Injuries and How They Occur."

INSTRUCTOR NOTE: The DVD will stop automatically at the end of the segment.

INSTRUCTOR NOTE: Your copy of the activity outcome follows on page 85. Coaches might not list the injuries in the same order as shown in your instructor guide. It is more important that they have listed the correct injuries and corresponding type of injury (acute versus chronic) for each tissue in the table.

After pausing the DVD, **CONDUCT** the activity debriefing as follows:

1. **TELL** coaches to correct their answers during the debriefing so that they end up with the correct activity outcome in their study guide.
2. **ASK** one coach for the answers to bone tissue injuries and types of injuries.
3. **ASK** other coaches if they agree or not, and if not, why.
4. **LEAD** the discussion to the activity outcome.
5. **CONTINUE** debriefing the other tissue injuries and types of injuries.

INSTRUCTOR NOTE: If you are running short on time, simply tell coaches the correct answers, which are given in the activity outcome.

Examples of Injuries That Affect Specific Body Tissues—Activity 3.1 Outcome

Tissue	Injury	Type of injury
Bone	Closed fracture Open fracture Avulsion fracture Osteoarthritis Stress fracture	Acute Acute Acute or chronic Chronic Chronic
Cartilage	Tear Contusion	Acute or chronic Acute
Ligament	Sprain	Acute
Muscle	Strain	Acute or chronic
Tendon	Strain Tenosynovitis Tendinosis Paratendinitis	Acute Chronic Chronic Chronic
Bursa	Bursitis Contusion	Chronic Acute
Skin	Laceration Incision Abrasion Puncture Avulsion (example: ear lobe)	Acute Acute Acute Acute Acute
Eye	Puncture Abrasion (corneal)	Acute Acute
Other organs (heart, kidney, and so forth)	Puncture Contusion	Acute Acute

ASK for questions about types of injuries.

C Injury Causes (9 minutes)

Activity 3.2 Injury Causes

REFER coaches to Activity 3.2 Injury Causes, page 11, in the *Sport First Aid Classroom Study Guide.*

INTRODUCE the activity.

As explained on the DVD segment, injuries are usually caused by one of three mechanisms: compression, tension, or shearing. In this activity, you'll learn what mechanisms often cause which injuries.

REVIEW the activity resources.

You'll use the table, Injuries and Their Mechanisms, that follows the activity instructions and activity outcome in the study guide.

EXPLAIN the activity instructions.

1. Work in teams of four if possible.

INSTRUCTOR NOTE: You may need to divide the coaches differently, depending on the size of your class. Even with a small class, be sure you have at least two teams so that they can compete against each other. Teams of two to four will work best, with four being optimal.

2. Work with your team to decide which mechanisms can cause each injury listed in the table.
3. Place an *X* in the column if that mechanism can cause the injury. For instance, if compression can cause a contusion, place an *X* under *Compression* and across from *Contusion*.
4. You may place more than one *X* in a row. That is, some injuries can be caused by several different mechanisms, and you should place an *X* under each of those. Other injuries may be caused by only one mechanism.
5. You will have 6 minutes to complete the table. You'll need to work quickly.
6. At the end, we will award points for correct answers and see which team won the challenge.

EXPLAIN the activity outcome.

When you're done, you should have completed the table with *Xs* in the columns that match the injuries with their mechanisms.

ASK for questions about the activity.

TELL coaches to begin the activity.

INSTRUCTOR NOTE: Your copy of the activity outcome follows on page 88.

After coaches have started the activity, **CIRCULATE** among them, and **COACH** (listen, comment, and answer questions). Be sure to not give away any answers, because this is a team competition.

After 6 minutes, **CONDUCT** the activity debriefing as follows:

1. **ASK** each team to choose a recorder.

   The recorder should keep track of how many correct or incorrect answers the team gets.

   Each correct answer—a column correctly left blank or correctly marked with an *X*—equals 1 point.

   There are 39 possible correct answers (blanks and *Xs*).
2. **REFER** the teams to Injuries and Their Mechanisms—Activity 3.2 Outcome in the Unit 3 Activity Outcomes section of the *Sport First Aid Classroom Study Guide*.
3. **TELL** the teams to use the activity outcome to score their activities.
4. **ASK** recorders to tally their total scores.

   They may choose to subtract the number they got wrong from 39.
5. Find out which team got the highest score. **ASK** "Did any team get over 25 correct?" "Over 30?" "Over 35?" Keep going as needed, as high as 39, to find out which team won the challenge.
6. **CONGRATULATE** all teams, including the winning team.

ASK for questions about injury causes.

Injuries and Their Mechanisms—Activity 3.2 Outcome

Acute injuries	Compression	Tension	Shearing
Contusions	X		
Abrasions			X
Lacerations	X		X
Incisions	X		
Sprains		X	X
Acute strains		X	
Cartilage tears	X		X
Dislocations and subluxations	X	X	
Bone fractures	X		
Epiphyseal fractures	X	X	
Chronic injuries			
Bursitis	X	X	X
Tendinosis, tenosynovitis, and paratendinitis		X	
Stress fractures	X		

D Unit Summary (1 minute)

REVIEW the key points of unit 3.

- Injuries are often caused by one of three mechanisms: compression, tension, or shearing.
- Injuries can be distinguished by the time it takes for them to develop.
  - Acute injuries occur suddenly as a result of a specific injury mechanism.
  - Chronic injuries develop over a period of several weeks and are typically caused by repeated injury.
- Knowing which mechanism caused an injury and knowing whether the injury occurred suddenly or over time may help you to correctly identify an injury and respond with appropriate first aid care.

ASK for questions about types of injuries or any other topic in this unit.