

# H: Orthopedic Nursing

Major Competency Area: **H**  
**Orthopedic Nursing**

Priority: **One**

Competency: **H-1**  
**Knowledge of Orthopedic Nursing**

Date: September 1, 2005

A Licensed Practical Nurse will:

**H-1-1 Demonstrate knowledge of human anatomy and physiology, specifically the musculoskeletal, nervous, and cardiovascular systems.**

**H-1-2 Demonstrate knowledge of common musculoskeletal disorders:**

- arthritis
- degenerative disorders
- dislocations
- fractures
- osteomyelitis
- osteoporosis
- compartment syndrome
- soft tissue injuries / multiple system injuries / trauma.

**H-1-3 Demonstrate ability to assess the musculoskeletal system and to differentiate normal and abnormal findings.**

**H-1-4 Demonstrate ability to provide nursing interventions to meet needs of client with common musculoskeletal disorders:**

- physical mobility and ambulation
- pain management
- nutritional needs
- protective devices.

**H-1-5 Demonstrate ability to teach client and family regarding use of ambulatory and immobilization aids such as:**

- canes
- crutch walking
- mechanical lifts
- use of braces and splints
- wheelchairs / walkers.

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Competency: **H-2**  
**Cast Care**

Date: September 1, 2005

A Licensed Practical Nurse will:

- H-2-1 Demonstrate knowledge of the pathophysiology of fractures, manifestations, and medical management.**
- H-2-2 Demonstrate knowledge and ability to care for clients with a variety of casts.**
- H-2-3 Demonstrate ability to assess client with a cast:**
- bleeding
  - cast drying
  - complications i.e., compartment syndrome, compression syndrome, infection
  - edema
  - external fixators
  - neurovascular status
  - pain.
- H-2-4 Demonstrate ability to cut cast as ordered by physician:**
- bivalving
  - trimming
  - removing
  - windowing
  - univalving
  - follow-up care.
- H-2-5 Demonstrate ability to teach client and family regarding cast care and observation for complications.**
- H-2-6 Demonstrate ability to document and report the assessment, location and type of cast, special procedures, and findings.**

Competency: **H-2**

**Cast Care**

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A Licensed Practical Nurse will:

- H-2-7      Demonstrate ability to describe common orthopedic diagnostic tests and nursing implications such as:**
- arthrogram
  - bone scan
  - computed axial tomography (CAT or CT scan)
  - magnetic resonance imaging (MRI)
  - myelogram
  - tomogram
  - X-ray.
- H-2-8      Demonstrate knowledge and ability to teach client and family about the diagnostic tests, procedures, and follow-up necessary as per agency policy.**

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Competency: **H-3**  
**Traction and External Fixators**

Date: September 1, 2005

A Licensed Practical Nurse will:

- H-3-1      Demonstrate knowledge of the purposes and safe care of the common methods of traction / external fixators such as:**
- manual
  - skeletal
  - skin.
- H-3-2      Demonstrate knowledge and application of the principles of traction.**
- H-3-3      Demonstrate the knowledge and ability to apply a variety of traction using proper equipment and techniques.**
- H-3-4      Demonstrate ability to assess the client in traction / external fixators and provide appropriate care and nursing interventions.**
- H-3-5      Demonstrate ability to teach client and family regarding traction / external fixators and safety precautions.**

Major Competency Area: **H**  
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Competency: **H-4**  
**Splints and Braces**

Date: September 1, 2005

A Licensed Practical Nurse will:

- H-4-1      Demonstrate knowledge and ability to use the common types of splints and braces.**
- H-4-2      Demonstrate ability to assess client in splint or brace and provide appropriate nursing care and interventions:**
- altered physiological needs
  - comfort measures
  - neurovascular status
  - noncompliance
  - pain
  - presence of contracture
  - range of motion and exercises
  - skin integrity.
- H-4-3      Demonstrate ability to teach client and family regarding the care, application, and complications of splints and braces.**