

# Y: Orthopedic Specialty

Major Competency Area: **Y**  
**Orthopedic Specialty**

Priority: **One**  
**Restricted Activity Authorization**

Competency: **Y-1**  
**HPA Authorization and Standards**

Date: September 1, 2005

A Licensed Practical Nurse will:

**Y-1-1 Demonstrate understanding of the restricted activity in the LPN Regulation 2003 (16) authorizing the orthopedic specialty:**

“Only a regulated member on the specialized practice register who is specifically authorized by the Registrar and who has verbal or written direction from an authorized practitioner who is on site and available to assist, may perform the restricted activity of setting or resetting a fracture of a bone for the purposes of inserting and removing orthopaedic devices and applying casts.”

Health Professions Act LPN Regulation 2003

**Note: Licensed Practical Nurses who practice the Orthopedic Specialty have (advanced) specialized education recognized by the CLPNA.**

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Competency: **Y-2**

**Knowledge and Application of  
Orthopedic Specialty**

Date: September 1, 2005

A Licensed Practical Nurse will:

**Y-2-1 Demonstrate knowledge of human anatomy and physiology of:**

- body systems
- body planes and directions
- related terminology.

**Y-2-2 Demonstrate knowledge of orthopedic medical conditions and treatment:**

- trauma:
  - dislocations
  - multiple fractures
  - compartment syndrome
  - fat embolism
- fractures:
  - spinal
  - extremities
  - pelvis
  - ribs
- arthritis:
  - ankylosing spondylitis
  - rheumatoid
  - degenerative
  - juvenile
- infection:
  - osteomyelitis
  - bursitis
  - general
- tears:
  - ligaments
  - tendons
  - meniscus

A Licensed Practical Nurse will:

**Y-2-2 Demonstrate knowledge of orthopedic medical conditions and treatment:  
(continued)**

- soft tissue injury
- other:
  - muscle injuries
  - osteoporosis
  - congenital disorders
  - kyphosis / scoliosis
  - contractures / deformities
  - growths / tumours.

**Y-2-3 Demonstrate ability to perform comprehensive assessment of the orthopedic client.**

**Y-2-4 Demonstrate ability to recognize a variety of x-ray views such as:**

- anterior / posterior
- axilla
- lateral
- mandibular
- panorex
- posterior / anterior
- oblique
- transverse
- tunnel.

**Y-2-5 Demonstrate ability to teach the use of orthopedic equipment such as:**

- cane
- cast removal equipment
- CPM machine (continuous passive motion)
- crutches
- walker.

**Y-2-6 Demonstrate knowledge and ability to measure angles of joints using a goniometer.**

Competency: **Y-2**

**Knowledge and Application of  
Orthopedic Specialty**

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**Restricted Activity Authorization**

A Licensed Practical Nurse will:

**Y-2-7 Demonstrate ability to receive verbal and written physician orders pertaining to orthopedics:**

- accept, transcribe, and initiate orders.

**Y-2-8 Demonstrate knowledge and ability to assist the physician with a variety of treatments and interventions such as:**

- setting a fracture of a bone
- inserting or removing orthopedic devices.

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Competency: **Y-3**

**Application of Orthopedic Devices**

Date: September 1, 2005

A Licensed Practical Nurse will:

**Y-3-1 Demonstrate ability to teach the application of orthopedic devices, in accordance with agency policy such as:**

- acromioclavicular harness
- airsplints
- ankle brace
- ankle foot orthosis
- back braces
- bunion splint
- clavicle strap
- elastic support stockings
- finger splint
- fracture brace
- Gibney boot
- Hare's traction
- hinged knee brace
- humeral fracture brace
- Iso-ulnar brace
- Jones bandage
- Pavlik harness
- Sager splint
- shoulder immobilizer / sling and swath / velpeau
- soft / hard cervical collar / triple ruff
- stump wrapping
- tibial / femoral braces
- tensors / tubigrip
- Zimmer splint / knee immobilizer.

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Competency: **Y-4**

**Cast and Splint Care**

Date: September 1, 2005

A Licensed Practical Nurse will:

**Y-4-1 Demonstrate knowledge of construction, application, removal, and teaching of cast and splint care such as:**

- above elbow
- above knee – walking and non-walking
- back slabs
- below elbow
- below knee – walking and non-walking
- body casts
- cylinder casts
- gutter splints
- hip spica
- patella tendon bearing
- plaster vs. fiberglass casts
- sugar tong
- spica casts
- uni-valve, bi-valve, windowing, trimming
- volar slabs
- wedging.

Major Competency Area: **Y**

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**Restricted Activity Authorization**

Competency: **Y-5**

**Application and Monitoring of Traction**

Date: September 1, 2005

A Licensed Practical Nurse will:

**Y-5-1 Demonstrate ability to set-up, apply, assist in application, and monitor manual, skin, and skeletal traction:**

- balanced suspension
- Balkan frame
- Bryant or Gallows
- Bucks
- Gardner Wells
- pelvic
- Russells or Split Russells
- skeletal
- skin
- skull
- Steinmen pin insertion.

**Y-5-2 Demonstrate knowledge and application of casts for treatments of fractures, dislocations, and skeletal disorders:**

- closed reductions under conscious sedation or use of bier block (ATS tourniquet).

**Y-5-3 Demonstrate ability to assist with application of traction, insertion, and removal of pin devices:**

- Crutchfield tongs
- External Fixators
- Gardner Wells tongs
- Halo devices
- Kirschner wires
- Steinmen pin.

Competency: **Y-5**

**Application and Monitoring of Traction**

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**Restricted Activity Authorization**

A Licensed Practical Nurse will:

**Y-5-4 Demonstrate ability to teach client and family regarding orthopedic treatment and care:**

- orthopedic condition
- equipment and devices
- orthopedic procedures
- physician orders and treatment plan.

