Low Back Pain Algorithm

This document is intended for use by primary care providers to help guide therapy for low back pain.

Goal: Improve low back pain that inhibits completion of military physical requirements

Brief History
(current problem, previous injuries and treatments, especially surgical intervention or injury to affected area)

WARNING
May require detailed evaluation, but can continue with algorithm

Is there any systemic process (i.e., rheumatologic or metabolic) that could be causing symptoms?

YES
Requires detailed evaluation

NO

Are any of the following symptoms (red flags) present?

• Unrelenting nocturnal pain
• Constitutional symptoms (fever, weight loss, night sweats, fatigue)
• Malignancy or history of malignancy
• Recent history of trauma; accompanied with “numbness” or sensation change in dermatomal distribution
• Bowel or bladder changes
• Abnormal vital signs

YES
Requires detailed evaluation

NO

Begin limited physical exam

Grossly abnormal appearance? (Visually inspect the area of pain)
Asymmetric lower extremity reflexes and/or strength

YES
Requires detailed evaluation

NO

Straight Leg Raise Test: positive
(See flip side for test descriptions)

YES
Requires detailed evaluation

NO

At this step there is a low likelihood that the cause of pain is from anything that would require specific medication or surgical intervention. It is likely safe to proceed with general rehabilitation for low back pain. (See flip side for additional instructions)
Directions for Special Tests

**Straight Leg Raise Test**

With the patient lying on his/her back, separately lift each leg by the ankle while keeping the knee fully straight. Continue lifting until the patient asks to stop or the range of motion is maximized. If there is neurologic pain (burning, electric-like feeling, or a “zap” of pain) running in a discrete band down a portion of the leg before reaching 70 degrees of hip flexion, the test result is positive.

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**Additional Options**

1. For additional information, see “Diagnosis and Treatment of Acute Low Back Pain” from American Family Physician:
   
   
   or

2. Consider referral to specialty care (Physical Therapy, Primary Care Sports Medicine, Orthopedic Surgery).

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**Note:** The Sports Medicine Experts at the Consortium for Health and Military Performance (CHAMP) can answer specific questions you may have through the online “Ask the Expert” feature on the Human Performance Resource Center (HPRC) website (http://hprc-online.org/ask-the-expert). HPRC is the educational arm of CHAMP located at the Uniformed Services University of the Health Sciences.