June 2026

Michigan Quality Improvement Consortium Guideline

Management of Acute Low Back Pain in Adults

The following guideline recommends assessment, diagnosis and management of acute low back pain in adults (low back pain of ≤ 4 weeks duration).[1]

Eligible Population	Key Components	Recommendation and Level of Evidence
Adults with low back pain or back-related leg symptoms for ≤ 4 weeks' duration	Patients with lower risk of serious pathology, i.e., no history of cancer, prolonged use of corticosteroids, or severe trauma	**Reassure:** Up to 90% of episodes resolve within 6 weeks regardless of treatment. **[C]** Advise that flare-ups may occur in the subsequent year and encourage exercise interventions as they may play a role in preventing recurrences. **Testing/Assessment:** Detailed history and physical exam, recent falls, strength, reflexes, spine percussion, segmental mobility. Assess pain and function (activities of daily living; ability to work, exercise, and perform household tasks). Diagnostic tests or imaging is rarely required for acute non- traumatic back pain (unless serious pathology suspected as noted below). **[B]** Consider depression screening [**B]** (PHQ-9), since concurrent coincident depression worsens prognosis. (see MQIC depression guideline) **General Approach to Care:** Stay active and keep activity modification to a minimum. Avoid bed rest. **[A]** Return to work guidance should be individualized and consider physical requirements of work. **Non-pharmacological Therapy:** Heat for painful areas may reduce pain due to muscle spasm **[B]**; stretching exercises **[D]** and spinal manual therapy **[B]** may be considered, as well as massage and acupuncture for interested patients. Additional modalities such as yoga, traction, and paraspinal injections are not supported by current evidence. **Medication Strategies:** NSAIDS in patients who can safely take them for a short-term (2 weeks) are the cornerstone of medication therapies (acetaminophen is generally not recommended, but in select patients for whom there are no safe alternatives and acetaminophen is the least harmful treatment, a trial of acetaminophen is a reasonable alternative). . Non- benzodiazepine muscle relaxants may be added but are sedating and may limit mobility. Opioids, including tramadol, and benzodiazepines are not indicated as first-line treatment, and early opioid use is associated with longer disability. If prescribed, limit to short-term (i.e., three to seven days), and only after assessing for risk of addiction or misuse. Avoid co-prescribing opioids with benzodiazepines, muscle relaxants or hypnotics due to high risk of respiratory depression and death. See MQIC Opioid Prescribing in Adults Guideline for more information. **Referral:** If pain and/or disability persists beyond 4 weeks, consider referral to a multidisciplinary back pain program, especially if psychosocial risks to return to work exist. **Work:** Return to work recommendations should be individualized, based on job physical requirements. **Injury Prevention:** Includes use of proper body mechanics and safe back exercises.
	Identification and management of suspected serious pathology	**Cauda Equina Syndrome:** (severe and/or progressive neurologic deficit, recent bowel or bladder dysfunction, perineal hypoesthesia) Management: Transfer to hospital emergency department for emergent studies and definitive care. **[C]** **Cancer:** history of cancer or cancer risks (age > 50; insidious onset of pain; smoking; no relief at bedtime or worsening when supine; constitutional symptoms, e.g., fever, unexplained weight loss) Management: CBC, urinalysis, C-reactive protein ± ESR. **[C]** Consider MRI (without and with contrast) - negative lumbosacral X-rays do not rule out cancer. **Infection:** e.g., epidural abscess, discitis, osteomyelitis (risks: steroid therapy; diabetes; immunosuppression; hemodialysis) history of UTI, TB, HIV, endocarditis or other infection; no relief of pain at bedtime or worsening when supine; recent surgery or spinal instrumentation (e.g., spine injection or myelogram); insidious onset; history of IV drug use; severe or progressive neurologic deficit) Management: CBC, urinalysis, C-reactive protein ± ESR. **[C]** Consider MRI (without and with contrast) - negative lumbosacral X-rays do not rule out infection. **Spinal Fracture:** (risks: older age group [esp. women age > 50]; recent injury or cumulative trauma; prolonged steroid therapy, cancer, osteoporosis or ankylosing spondylitis) Management: lumbosacral X-rays. **[B]** After 10 days, if fracture still suspected or multiple sites of pain, consider MRI or referral. **[D]** **Epidural Hemorrhage:** (risks: anticoagulation, recent spinal instrumentation or catheter, lumbar puncture) Management: Transfer to hospital emergency department for emergent studies and definitive care; reversal of anticoagulation as needed.

[1] Acute Low Back Pain | Acute Pain (cdc.gov)

Levels of Evidence for the most significant recommendations: A = randomized controlled trials; **B** = controlled trials, no randomization; **C** = observational studies; **D** = opinion of expert panel

This guideline lists core management steps. It is based on several sources, including North American Spine Society (NASS). Diagnosis and treatment of low back pain. 2020. Diagnosis and Treatment of Low Back Pain - Clinical Guideline (spine.org) Qaseem A, Wilt TJ, McLean RM, Forciea MA., Noninvasive Treatments for Acute, Subacute, and Chronic Low Back Pain: A Clinical Practice Guideline from the American College of Physicians. Ann Intern Med. 2017;166:514–530. doi: 10.7326/M16-2367.Individual patient considerations and advances in medical science may supersede or modify these recommendations. UpToDate: Treatment of Acute Low Back Pain. This topic last updated: May 2026.