

The following guideline recommends assessment, diagnosis and treatment interventions for the management of acute low back pain in adults.

Eligible Population	Key Components	Recommendation and Level of Evidence
Adults with low back pain or back-related leg symptoms for < 6 weeks	Assessment to identify potential serious pathology (red flags)	<ul style="list-style-type: none"> ◆ Cauda Equina Syndrome (severe or progressive neurologic deficit, recent bowel or bladder dysfunction, saddle anesthesia). ◆ Cancer (especially if age >50, insidious onset, no relief at bedtime or worsening when supine, constitutional symptoms, fever, unexplained weight loss, male with diffuse osteoporosis, or compression fracture, previous cancer history). ◆ Fracture (especially women age >50, traumatic injury or onset, cumulative trauma, steroid use history). ◆ Infection (more likely with the following risks: steroid use history, diabetes mellitus, immune suppression, no relief at bedtime or worsening when supine, history of UTI or other infection, HIV, previous surgery, IV drug use, history of TB, severe or progressive neurologic deficit, fever and chills). ◆ NOTE: Radicular pain in absence of significant or progressive neurologic deficit is NOT an indication for MRI.
	Patients with high risk of serious pathology (red flags and high index of suspicion)	<ul style="list-style-type: none"> ◆ Cauda Equina Syndrome or severe or progressive neurologic deficit – refer for emergency studies and definitive care [C]. ◆ Spinal Fracture or compressions – Plain 2-view LS spine X-ray [B]. After 10 days, if fracture still suspected or multiple sites of pain, consider either bone scan [C] or referral [D] before considering CT or MRI. ◆ Cancer or infection – CBC, urinalysis, ESR [C]. If still suspicious, consider referral or further testing (e.g. bone scan [C] or other labs; NOTE: negative plain film X-ray does NOT rule out disease).
	Patients with low risk of serious pathology (no red flags)	<p>Reassure:</p> <ul style="list-style-type: none"> ◆ 90% of episodes resolve within 6 weeks regardless of treatment [C]. Advise that minor flare-ups may occur in the subsequent year. <p>Therapy:</p> <ul style="list-style-type: none"> ◆ Stay active and continue ordinary activity within the limits permitted by pain. Avoid bed rest [A]. <i>Early return to work is associated with less disability.</i> ◆ Injury prevention – proper body mechanics and safe back exercises. ◆ Recommend heat or ice and stretching exercises [D] <i>Data on superiority/benefit of heat versus cold is conflicting.</i> ◆ Manual/manipulative therapy provided by an osteopath, physical therapist or chiropractor is indicated for management of acute LBP. <i>Anticipated timeline for treatment response is 3-5 treatments; treatment duration not to exceed 12 weeks.</i> ◆ Physical therapy directed/supervised exercise or core strengthening <i>is recommended starting after 2-6 weeks.</i> ◆ Routine use of modalities for chronic LBP is not indicated. <p>Referral:</p> <ul style="list-style-type: none"> ◆ Before considering surgical consult, refer for physiatrist (PMR) [B] or manual therapy [D]. ◆ Surgery is usually not required, but may be indicated if severe or progressive neurologic deficit. ◆ If persistent disability at 2 weeks, consider referral for non-invasive therapy <i>for improving flexibility and strength, NOT modalities such as ultrasound, traction, or TENS.</i> <p>Medication Strategies:</p> <ul style="list-style-type: none"> ◆ NO drug categories have been proven to be more effective in pain control, consider side-effect profiles. ◆ Opiates are generally not indicated as first-line treatment. Although opiates relieve pain, early opiate use may be associated with longer disability, even after controlling for case severity [D]. ◆ If prescribed, opiate use should be limited to short-term (i.e. 2 weeks).

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

Used with permission of Michigan Quality Improvement Consortium. This guideline lists core management steps. It is based on several sources, including the Adult Acute and Subacute Low Back Pain Guideline, Institute for Clinical Systems Improvement, 2012 (www.icsi.org) and Chou R, Qaseem A, Snow V, Casey D, Cross JT Jr, Shekelle P, Owens DK; Clinical Efficacy Assessment Subcommittee of the American College of Physicians; American College of Physicians; American Pain Society Low Back Pain Guidelines Panel. Ann Intern Med. 2007 Oct 2;147(7):478-91. Individual patient considerations and advances in medical science may supersede or modify these recommendations.