

Low Back Pain

Many adults will experience low back pain at some time in their lives. Most people get better in less than 4 weeks. Symptoms may include numbness, tingling, and weakness. Most people with low back pain without other complicating factors do not require imaging tests.

For individuals who have persistent or worsening symptoms despite medical management or who are surgical candidates, lumbar spine imaging including MRI without contrast is usually appropriate. X-rays, MRI lumbar spine (<https://www.radiologyinfo.org/en/info/spinemr>) without and with contrast, whole-body bone scan (<https://www.radiologyinfo.org/en/info/dexa>), CT lumbar spine (<https://www.radiologyinfo.org/en/info/spinect>) without contrast, and CT myelography (<https://www.radiologyinfo.org/en/info/myelography>) (contrast injected into spinal canal) may be appropriate.

For individuals with cauda equina syndrome (in which nerves in the lower back are severely compressed), lumbar spine imaging including MRI with and without contrast and MRI without contrast is usually appropriate. CT without contrast and CT myelography may be appropriate.

For individuals with prior surgery who have new or worsening symptoms, lumbar spine imaging including x-ray (<https://www.radiologyinfo.org/en/info/boneraad>), MRI without and with contrast, and MRI without contrast is usually appropriate. CT without contrast and CT myelography may be appropriate.

For individuals with trauma, osteoporosis (<https://www.radiologyinfo.org/en/info/osteoporosis>), of elderly age, or use of steroids, lumbar spine imaging including x-ray, MRI without contrast, and CT without contrast is usually appropriate. MRI without and with contrast and CT myelography may be appropriate.

For individuals with suspicion of cancer, infection, or immunosuppression, lumbar spine imaging including MRI without and with contrast and MRI without contrast is usually appropriate. X-rays, CT without contrast, CT with contrast, or CT myelography may also be appropriate.

— By Natalie Skopicki and Ryan K. Lee, MD. This information originally appeared in the *Journal of the American College of Radiology*.

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