RadiologyInfo.org
For patients

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/bonerad) , 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*.

Disclaimer

This information is copied from the RadiologyInfo Web site (http://www.radiologyinfo.org) which is dedicated to providing the highest quality information. To ensure that, each section is reviewed by a physician with expertise in the area presented. All information contained in the Web site is further reviewed by an ACR (American College of Radiology) - RSNA (Radiological Society of North America) committee, comprising physicians with expertise in several radiologic areas.

However, it is not possible to assure that this Web site contains complete, up-to-date information on any particular subject. Therefore, ACR and RSNA make no representations or warranties about the suitability of this information for use for any particular purpose. All information is provided "as is" without express or implied warranty.

Please visit the RadiologyInfo Web site at **http://www.radiologyinfo.org** to view or download the latest information.

Note: Images may be shown for illustrative purposes. Do not attempt to draw conclusions or make diagnoses by comparing these images to other medical images, particularly your own. Only qualified physicians should interpret images; the radiologist is the physician expert trained in medical imaging.

Copyright

This material is copyrighted by either the Radiological Society of North America (RSNA), 820 Jorie Boulevard, Oak Brook, IL 60523-2251 or the American College of Radiology (ACR), 1891 Preston White Drive, Reston, VA 20191-4397. Commercial reproduction or multiple distribution by any traditional or electronically based reproduction/publication method is prohibited.

Copyright ® 2026 Radiological Society of North America, Inc.