**Supplemental Table 1: List of ICD-9 codes for low back injuries or disorders**

| **ICD-9 Code** | **Description** |
| --- | --- |
| **More Severe** |
| 344.6 | Cauda equine Syndrome  |
| 344.60 | Cauda equine Syndrome without neurogenic bladder |
| 344.61 | Cauda equine Syndrome with neurogenic bladder |
| 353.1 | Lesions, lumbosacral plexus |
| 353.4 | Lesions, lumbosacral root NEC |
| 353.8 | Disorder, nerve root/plexus NEC |
| 353.9 | Disorder, nerve root/plexus NOS |
| 355.0 | Lesion, sciatic nerve |
| 721.42 | Spondylosis with myelopathy lumbar region |
| 722.1 | Displacement of thoracic or lumber intervertebral dis without myelopathy |
| 722.10 | Displacement of lumber intervertebral disc without myelopathy |
| 722.73 | Intervertebral dis disorder with myelopathy lumber region |
| 722.83 | Postlaminectomy syndrome of lumber region |
| 724.02 | Spinal stenosis of lumbar region |
| 724.3 | Sciatica |
| 724.4 | Thoracic or lumbosacral neuritis or radiculitis unspecified |
| 724.6 | Disorders of sacrum |
| 738.4 | Acquired Spondylolisthesis |
| 952.2 | Lumbar spinal cord injury without spinal bone injury |
| 952.3 | Sacral spinal cord injury without spinal bone injury |
| 952.4 | Cauda equina spinal cord injury without spinal bone injury |
| 952.8 | Multiple site of spinal cord injury without spinal bone injury |
| 953 | Injury to nerve roots and spinal plexus |
| 953.2 | Injury lumbar nerve root |
| 953.3  | Injury to sacral nerve root |
| 953.5 | Injury to lumbosacral plexus |
| 953.8 | Injury to multiple sites of nerve root and spinal plexus |
| 956.0 | Injury sciatic nerve |
| **Less Severe** |  |
| 720.2 | Sacroiliitis NEC |
| 721.3 | Spondylosis, lumbosacral |
| 722.32 | Schmorl’s nodes of lumbar region |
| 722.5 | Degeneration of thoracic or lumbar intervertebral disc |
| 722.52 | Degeneration of lumbar or lumbosacral intervertebral disc  |
| 722.93 | Other and unspecified disc disorder of lumbar region |
| 724.2 | Lumbago |
| 724.5 | Backache unspecific |
| 724.7 | Disorders of coccyx |
| 724.70 | Other disorders of coccyx |
| 724.71 | Hypermobility of coccyx |
| 724.79 | Other disorder of coccyx  |
| 737.3 | Kyphoscoliosis and scoliosis |
| 737.30 | Scoliosis and Kyphoscoliosis idiopathic |
| 737.39 | Other Kyphoscoliosis and scoliosis |
| 737.4 | Curvature of spine associated with other conditions  |
| 737.40 | Unspecific curvature of spine associated with other conditions  |
| 737.41 | Kyphosis associated with other conditions  |
| 737.42 | Lordosis associated with other conditions |
| 737.43 | Scoliosis associated with other conditions |
| 739.3 | Nonallopathic lesions of lumbar region not elsewhere classified |
| 739.4 | Nonallopathic lesions of sacral region not elsewhere classified |
| 839.2 | Closed dislocation thoracic and lumbar vertebra  |
| 839.20 | Closed dislocation lumbar vertebra |
| 939.41 | Closed dislocation coccyx |
| 839.42 | Closed dislocation sacrum |
| 846 | Sprain and strains of sacroiliac region |
| 846.0 | Lumbosacral joint or ligament sprain |
| 846.1 | Sacroiliac ligament sprain |
| 846.2 | Sacrospinatus ligament sprain |
| 846.3 | Sacrotuberous ligament sprain |
| 846.8 | Other specified sites of sacroiliac region sprain |
| 846.9 | Unspecific site of sacroiliac region sprain |
| 847.2 | Lumbar sprain |
| 847.3 | Sacrum sprain |
| 847.4 | Coccyx sprain |