

Table 20.1 Thoracic Spinal Segment Innervations for the Trunk Musculature

Muscle	Spinal segment
Serratus posterior superior (elevation of superior ribs to aid inspiration)	T1-T4
Serratus posterior inferior (depression of lower ribs to aid inspiration)	T9-T12
Intercostals (elevation of ribs to aid inspiration)	T1-T12
Rectus abdominis (trunk flexion)	T5-T12
External oblique (trunk rotation and flexion)	T7-T12
Transverse abdominis (compression of abdominal viscera and trunk stabilization)	T7-L1
Internal oblique (trunk rotation and flexion)	T7-L1
Upper erector spinae (back extension)	T1-T12

From S. Shultz, P. Houglum, and D. Perrin, 2016. *Examination of musculoskeletal injuries*, 4th ed. (Champaign, IL: Human Kinetics).