

## Anatomy & Physiology: Muscles—External Intercostals.

### STRUCTURE.

- Origin: inferior border of rib above.
- Insertion: superior border of rib below.

### FUNCTION.

- Concentric action: elevate ribs and increase anteroposterior and lateral dimensions of the thoracic cavity (inhalation); contralateral rotation of trunk. Lesser: trunk flexion, extension, lateral flexion.
- Reverse mover action: depress ribs 1-11; trunk rotation, lateral flexion, flexion, ipsilateral rotation.
- Eccentric action: controls/restrains/slows depression of ribs 2-12; trunk ipsilateral rotation, flexion, extension, and contralateral lateral flexion.
- Isometric action: stabilization of ribs and trunk.
- Innervation: thoracic nerve T2-T12.
- Arterial supply: anterior intercostal arteries, posterior intercostal arteries, costocervical trunk and superior thoracic arteries.

CLINICAL SIGNIFICANCE.

## References

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