Thoracic trauma in Iraq and Afghanistan.

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BACKGROUND: Thoracic injuries are common among civilian trauma and have a high associated mortality. The use of body armor and exposure to different mechanisms of injury in combat setting could lead to different injury patterns and incidences from those found in peacetime.

METHODS: Thoracic trauma incidence rates and mortality risks were calculated from data extracted from the Joint Theatre Trauma Registry.

RESULTS: Among patients injured in military operations in Iraq and Afghanistan, 10.0% sustained thoracic injuries and had a mortality rate of 10.5%. Penetrating injuries were the most common mechanism of injury. The most common thoracic injury was pulmonary contusion. The highest mortality rate was in the subset of patients with thoracic vascular injuries or flail chest. The variables most strongly associated with mortality were number of units of blood transfused, admission base deficit, international normalization ratio, pH, Abbreviated Injury Scale scores for head and neck regions, and Injury Severity Score. Blunt injuries had the same mortality risk as penetrating injuries.

CONCLUSION: Combat-related thoracic trauma is common and associated with significant mortality in Iraq and Afghanistan.