

# THE COMBAT ENVIRONMENT AND EPIDEMIOLOGY OF MUSCULOSKELETAL COMBAT CASUALTIES

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## *Overview of the Iraq and Afghanistan Wars' Tactical and Operational Environment*

The majority of US armed conflicts prior to the 21st century, with the exception of portions of the Vietnam War, took place along the lines of traditional general warfare in which forces conduct major combat operations against an organized, uniformed enemy. The US military over the past 2 centuries has successfully employed a military strategy based upon the principle foundations of advanced technology, discipline, aggressive military action, ability to change and conserve military practices as the needs arise, and power to finance wars.<sup>1</sup> This “Western Way of War” has become the dominant mode of warfare throughout the world. Countries employing its principles have consistently fielded armies with greater fighting potential than their enemies.

The conflicts in Iraq and Afghanistan markedly differ from previous US military engagements in that these are irregular wars in which there is a violent struggle among state and nonstate actors for legitimacy and influence over the civilian population. Additionally, there is neither a uniformed enemy nor defined front lines, and alliances can easily shift.<sup>2</sup> Enemies of the coalition forces in Iraq and Afghanistan are unable to successfully challenge the US military in traditional general warfare. Therefore, they have principally used unconventional tactics of

terrorism, insurgency, and guerrilla warfare to counteract the traditional US military advantages of superb military discipline and advanced technology.

As a result, most combat casualties in Iraq and Afghanistan occur due to ambush or, increasingly, from the use of improvised explosive devices (IEDs).<sup>3,4</sup> IEDs are destructive weapons deployed in unconventional methods that are designed to hinder and defeat the opposing force’s superior military assets in the field. IEDs are constructed from homemade, commercial, or military explosive material and are most often tactically used in the form of buried artillery rounds, antipersonnel mines, and car bombs.<sup>5,6</sup> The rampant use of IEDs and other terrorist tactics by al-Qaeda and the Sunni insurgents against US and coalition forces in Iraq has been directed at thwarting US military efforts and damaging the Iraqi civilian population’s perception that the sovereign representative Iraqi government could provide stability and order. The ultimate goal of these attacks by IEDs and related vehicular-borne IEDs, commonly referred to as “suicide car bombs,” has been to sway public opinion enough to effectively delegitimize the Iraqi government or to pressure the democratically elected civilian leadership to capitulate to the enemies’ demands. To this end, the US and coalition forces’ most important and yet difficult task has been to protect the “soft target” of the general Iraqi population.

At the onset of the Iraq War, the US military’s overall operational strategy was predicated upon the total defeat and destruction of the enemy in accordance with the principle of aggressive military action