Throughout human history, major medical advances have been made during war. The care of combat casualties in Iraq and Afghanistan over the last 20 years has led to significant advances in both the surgical and critical care of victims of trauma. Among those advances are the routine use of tourniquets, permissive hypotension, hemostatic agents, massive transfusion protocols, use of whole blood, Resuscitative Endovascular Balloon Occlusion of the Aorta (REBOA), damage control techniques, care of total brain injury, amputation rehabilitation, and critical care transportation. This presentation will review the major advances that have been made as a result of war and discuss near future applications of these continued lessons learned.