

# Trauma Transfer - IED Shock Mitigation

	<p><b>Sudden and traumatic transference</b> of shock throughout a vehicles framework is enough to cause brain injury and even death.</p> <p>Beyond the <i>blast-flash</i>, direct energy destruction and fragmentation of an IED, the horizontal and lateral injuries can cause Traumatic Brain Injury (TBI) as well as other damage.</p> <p>The spinal column is much more than the backbone; it is our bodies' superhighway of function. Intense traumatic injuries to this can affect every aspect of daily living, and can account for changes from dietary to complete personality change.</p> <p>Studies have shown that the sudden acceleration rate of an IED blast event goes far beyond tolerable g-force levels. Through advanced modeling, preventative dampening and shock absorbing measures, placed at strategic points, we can mitigate intense energy transference throughout the vehicle.</p>
	<p><b>The BD9000 project</b> addresses TBI through its Shock Mitigation Seat (SMS). The combination of proven shock mitigation and ballistic materials, enveloped over a lightweight ballistic hybrid seat offers not only ballistic protection, but shock mitigation as well. These readily integrated materials have proven technical readiness levels and can provide real and much needed protection to our troops. While independently, these are making their way onto the battlefield, the BD9000-SMS combination will dramatically offset TBI on a number of platforms.</p>