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## RC(S) C-IED AWARENESS GTA



(S) C-IED AWARENESS TRAINING AID

29 OCT 2013

## **C-IED TRAINING GREEN HASH**

**IED Blast and Fragmentation Distances** 

Threat	Explosive Capacity	Building Evacuation Distance	Outdoor Evacuation Distance
Pipe Bomb	5lbs/2.3kg	70ft/21m (5psi at 26ft)	850ft/259m (40psi at 9ft)
Suicide Bomber/ Small Case	20lbs/9kg	110ft/34m (5psi at 40ft)	1200ft/365m (40psi at 14ft)
Car	500lbs/227kg	320ft/98m (5psi at 119ft)	1,750ft/534m (40psi at 39ft)
SUV/VAN	1000lbs/454kg	400ft/122m (5psi at 150ft)	2,750ft/838m (40psi at 50ft)
Small Van/Truck	10,000lbs/4,536kg	860ft/263m (5psi at 323ft)	3,750ft/1,143m (40psi at 107ft)
Water/Jingle Truck	30,000lbs/13,608kg	1,240ft/375m (5psi at 466ft)	6,500ft/1,982m (40psi at 155ft)
Semi-Trailer	60,000lbs/27,216kg	1,570ft/475m (5psi at 587ft)	7,000ft/2,134m (40psi at 195ft)

A 5 psi blast overpressure will rupture eardrums in about 1% of subjects, and a 45 psi overpressure will cause eardrum rupture in about 99% of all subjects. The threshold for lung damage occurs at about 15 psi blast overpressure. A 35-45 psi overpressure may cause 1% fatalities, and 55 to 65 psi overpressure may cause 99% fatalities.

It is important to note that the given distances do not guarantee Outdoor Evacuation Distance safety, they are estimates based on test data and the area near and around the evacuation distances are still potentially dangerous, seek cover.

Preferred area (beyond this line) for evacuation of personnel in buildings and mandatory for people outdoors

All personnel in this area should seek shelter immediately inside a building away from windows and exterior walls. Avoid having anyone outside.

All personnel must evacuate (both inside /outside of buildings)

Building Evacuation Distance