



Homeland
Security

Improvised Explosive Device (IED) Types by Function

IEDs can be characterized primarily by the following functions: delivery mechanism and trigger mechanism.

Delivery Mechanism



Photos: DHS/OBP Picture Library

Delivery mechanisms include: vehicle-borne, person-borne/human-borne, placed, and projected (or thrown).

- **Vehicle-borne:** delivered by any vehicle (e.g. passenger vehicle, motorcycle, moped, bicycle, truck, boat, aircraft, etc.). The vehicle also serves as concealment.
- **Person-borne/human-borne:** delivered by a person using belts, backpacks, or even internally placed devices. The operator plans to kill himself/herself as part of the attack.
- **Placed:** put in place by an individual. This method allows the operator to retreat to a safe distance.
- **Projected:** thrown or projected using a device of some kind. This method also allows the operator to maintain a safe distance.

Trigger Mechanism



Photos: DHS/OBP Picture Library

There are three primary trigger mechanisms: time, victim-operated, and command-initiated.

- **Time-detonated mechanisms** can use an electronic device, a mechanical device (such as a clock), chemicals, or fuses to create a delay.
- **Victim-operated mechanisms** are triggered by action (such as picking something up), pressure, or movement by the victim.
- **Command-initiated mechanisms** can be hard-wired or radio-controlled using an apparatus that emits a frequency or a signal of some kind. Examples include cell phones, radios, doorbells, keyless entry systems, pagers, and car alarms.

References:

- Weapons Technical Intelligence (WTI) Improvised Explosive Device (IED Lexicon 3d Edition July 2010 (For Official Use Only)
- Indicators and Warnings on Homemade Explosives, Technical Support Working Group, Training Technology Development Subgroup First Edition, December 2007 (For Official Use Only)