You have heard the term I.E.Ds mentioned in the news so many times people get desensitized to the word. However this is one of the scariest enemies you can come up against. You can’t fight it. You can’t look it in the face….and it kills indiscriminately. The term Improvised Explosive Device comes from the British Army in the 1970s, after the Provisional Irish Republican Army (IRA) used bombs made from agricultural fertilizer and Semtex smuggled from Libya to make highly effective booby-trap devices or remote-controlled bombs.

An IED is a bomb fabricated in an improvised manner incorporating destructive, lethal, noxious, pyrotechnic, or incendiary chemicals and designed to destroy or incapacitate personnel or vehicles. In some cases, IEDs are used to distract, disrupt, or delay an opposing force, facilitating another type of attack.

IEDs may incorporate military or commercially sourced explosives, and often combine both types, or they may otherwise be made with homemade explosives (HME). An IED has five components: a switch (activator), an initiator (fuse), container (body), charge (explosive), and a power source (battery). An IED designed for use against armored targets such as personnel carriers or tanks will be designed for armor penetration, by using a shaped charge that creates an explosively formed penetrator.

IEDs are extremely diverse in design, and may contain many types of initiators, detonators, penetrators, and explosive loads. Antipersonnel IEDs typically also contain fragmentation-generating objects such as nails, ball bearings or even small rocks to cause wounds at greater distances than blast pressure alone could.

IEDs are triggered by various methods, including remote control, infrared or magnetic triggers, pressure-sensitive bars or trip wires (victim-operated). In some cases, multiple IEDs are wired together in a daisy chain, to attack a convoy of vehicles spread out along a roadway. IEDs made by inexperienced designers or with substandard materials may fail to detonate, and in some cases actually detonate on either the maker or the emplacer of the device (these unintended early detonations are known as pre-detonations, "own goals", or "self-resolving bomb-tech removal" if the placer is killed in the detonation).

Some groups, however, have been known to produce sophisticated devices that are constructed with components scavenged from conventional munitions and standard consumer electronics components, such as mobile phones, washing machine timers, pagers, or garage door openers. The sophistication of an IED depends on the training of the designer and the tools and materials available.

IEDs may use artillery shells or conventional high-explosive charges as their explosive load as well as homemade explosives. However, the threat exists that toxic chemical, biological, or radioactive (dirty bomb) material may be added to a device, thereby creating other life-threatening effects beyond the shrapnel, concussive blasts and fire normally associated with bombs. Chlorine liquid has been added to IEDs in Iraq, producing clouds of chlorine gas.

A vehicle-borne IED, or VBIED, is a military term for a car bomb or truck bomb but can be any type of transportation such as a bicycle, motorcycle, donkey, etc. These are typically employed by insurgents, and can carry a relatively large payload. They can also be detonated from a remote location. VBIEDs can create additional shrapnel through the destruction of the vehicle itself, as well as using vehicle fuel as an incendiary weapon. The act of a person’s being in this vehicle and detonating it is known as an SVBIED suicide.

Of increasing popularity among insurgent forces in Iraq is the house-borne IED, or HBIED, coming out of the common military practice of clearing houses; insurgents will rig an entire house to detonate and collapse shortly after a clearing squad has entered.

Here are some Photos of different IED:
Explosives and fuel found in the back of a Pickup truck in Iraq.

An IED explodes prematurely next to a road.

The aftermath of a VBIED or Vehicle Borne Improvised Explosive Device.
This device was designed and built by Hezbollah, exported to Iran and then supplied to the Insurgents in Iraq. It is designed to punch the copper war head through tank armor.

This 500-pound bomb, rigged up as an IED, was found in an old IED hole by Sappers performing route clearance on Nov. 12.

Designed for maximum casualties and initiated by a mobile phone. The bomber can be easily a mile away and will use a marker such as a tree or some other recognizable object to tell him when the targets are in the Kill zone.
This is a particular nasty one attached to the side of a fuel can. Designed to catch everything in the blast radius, on fire.

Another nasty one. An anti-tank mine attached to artillery shells.

(*this information is reprinted from the Facebook page: the Devils Playground, sharing for education)