

# 'Infernal Machines'

## IMPROVISED EXPLOSIVE DEVICES

Improvised explosive devices (IEDs) have become the principal weapon for insurgents who are fighting superior military forces. They have also become a significant cause of civilian casualties. This chapter surveys the range of IEDs and tactics currently being used, the resulting civilian casualties, and efforts to mitigate the threat.

The chapter's main findings include the following:

- IEDs killed and injured at least 13,000 civilians in 44 countries in 2011, according to open-source reporting. The actual toll is probably higher and more research is needed to assess the overall impact that IEDs have on communities, development, and governance.
- Globally, the ratio of non-fatal civilian IED injuries to deaths was approximately 3:1 in 2011.
- The vast majority of civilian IED casualties occurred in Afghanistan, Iraq, and Pakistan in 2011.
- It is possible to make it harder for militants to source the materials most commonly used to make the large IEDs that are responsible for the majority of civilian casualties, but such measures are difficult to implement, especially in the worst-affected countries.
- Militant Sunni Islamist groups are responsible for the overwhelming majority of civilian casualties inflicted in IED attacks. This is largely attributable to their use of large IEDs and indiscriminate tactics.

The chapter includes a series of interviews carried out with residents and a Taliban commander from Kandahar and Helmand, the Afghan provinces that are most severely affected by IEDs. Residents of this IED zone said that moving from rural areas to district centres or provincial capitals placed them at the greatest risk of triggering an IED. The resulting reluctance to travel restricts their access to health care, education, and governance that are lacking in their villages.

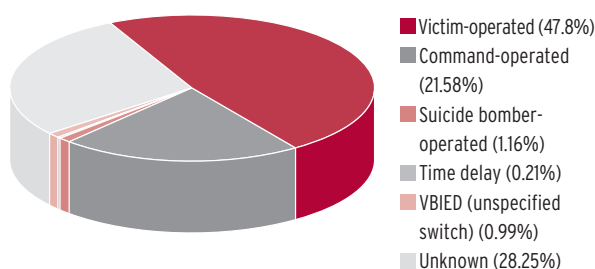
One doctor recounted that he had treated bomb setters who were injured during a premature detonation, saying they were naïve and inexperienced locals who had been recruited by the Taliban. Other interviewees affirmed that the Taliban recruited youths to plant IEDs. While the Taliban commander acknowledged that some civilians had been killed by IEDs, he refused to take responsibility for the casualties, suggesting that the victims themselves were at fault as they had ignored warnings about the placement of IEDs on certain roads.

### IED types, tactics, and casualties

This chapter establishes that victim-activated and -operated IEDs (VOIEDs) represent a significant threat to civilians as they are indiscriminate weapons. The threat is especially great in Afghanistan, where these types of IEDs are used most prolifically. Their usage will probably decline after the withdrawal of foreign forces in 2014, however.

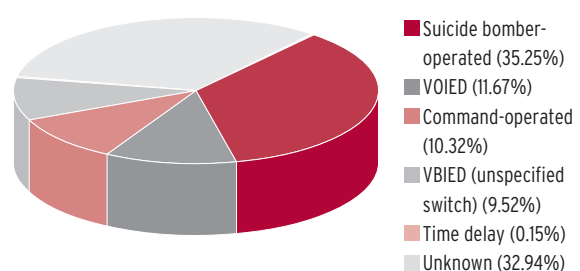
The IEDs that are responsible for most civilian casualties around the world are the ones that deliberately target civilians in mass-casualty attacks, as well as vehicle-borne IEDs (VBIEDs) that are used in areas frequented by civilians. Figures 10.2 and 10.3 show IEDs and civilian IED casualties in Afghanistan by switch type; many of the 'unknown' casualties are likely to be as a result of victim-operated IEDs.

Figure 10.2 IEDs in Afghanistan by switch type, 2011



Source: declassified military statistics covering 2011 provided to the authors in 2012

Figure 10.3 Civilian IED casualties in Afghanistan, by switch type, 2011



Source: declassified military statistics covering 2011 provided to the authors in 2012

## **Preventive measures**

An obvious way to reduce this threat is to restrict access to the materials commonly used in the more dangerous types of IEDs. Such measures include the disposal of military ordnance and the regulation of commercial explosives that can be used to make powerful, yet concealable, suicide bombing vests and booster charges for large VBIEDS using home-made explosive (HME). These measures, however, cannot be effectively enforced in the countries that suffer most from IEDs, largely due to corruption, lack of capacity, and porous borders.

**For many countries, the diversion of commercial explosives is a very serious problem.**

More research is needed to determine whether overly complicated regulations and the practice of bribing officials to obtain licences are fuelling black market demand for explosives. If so, it may be possible to improve licensing systems so that it is easier for legitimate users to obtain explosives legally. While this approach may seem counter-intuitive, it would shrink the black market and improve oversight, thereby restricting militant access to explosives.

**Demand for explosives from unlicensed mining operations creates black markets that can be used by militants.**

Limiting access to common HME precursors such as certain types of fertilizer can help increase the logistical burden on bomb makers, but such measures have to be weighed against the cost of regulation and the impact they have on agriculture, commerce, and industry. Such measures are significantly less practical in developing countries with agrarian societies. Nevertheless, there is still scope for more international cooperation on monitoring HME precursors and other potential IED components.

Given that the greatest IED threat to civilians comes from militant Sunni Islamists, a campaign to raise awareness in Muslim countries could have merit, especially if supported by respected Islamic scholars and clerics. This would highlight the impact that militant Sunni Islamist IED attacks are having on civilians and condemn the use of indiscriminate weapons and tactics. If the long-running campaign to stigmatize landmines and cluster munitions has been the most effective way of reducing their usage—as claimed by the NGOs involved—then the stigmatization of mass-casualty weapons and tactics may also prove to be the most practical way of reducing civilian IED casualties. ■