In Monitor Impact thematic reporting, the term "improved mines" is synonymous with victim-activated improvised explosive devices (IEDs).

IEDs are "homemade" explosive weapons that are designed to cause death or injury.

Improvised mines are victim-activated IEDs that are detonated by the presence, proximity, or contact of a person or a vehicle. These are sometimes referred to as artisanal mines, victim-operated IEDs (VO-IEDs), or are referred to by the type of construction or initiation system, such as pressure-plate IEDs (PP-IEDs) and crush wire IEDs.

Improvised mine types that can explode due to presence, proximity, or contact of a person, fit the definition of antipersonnel mines and are therefore prohibited under the Mine Ban Treaty.

Available information indicates that the fusing of most improvised mines causing casualties worldwide allows them to be activated by a person. For example, the United Nations Assistance Mission in Afghanistan (UNAMA) has reported that most of the improvised mines in Afghanistan had the "trigger sensitivity of an anti-personnel mine."1 In 2021, UNAMA called on armed non-state actors to ban the use of "pressure-plate IEDs," stating that "these devices, as used in Afghanistan, are victim-operated and inherently indiscriminate, and function as anti-personnel landmines."2

The Impact of Improvised Mines

**Definitions and background**

- The scale of use of improvised mines has increased the magnitude of mine contamination and the number of casualties dramatically since 2014.
- Most casualties of improvised mines are believed to be caused by antipersonnel (improved) mine types.
- Improvised mine types have caused the most recorded casualties of any mine/explosive remnants of war (ERW) type annually since 2012.
- Several Mine Ban Treaty States Parties that have not declared clearance obligations are suspected of having contamination by improvised mines and need to clarify the extent of contamination and their obligations for clearance.
- More States Parties need to disaggregate improvised mines cleared from other mine and ERW types.
- Clearance and the provision of risk education about improvised mines can be sensitive in some contexts because these mine types are used by parties actively engaged in conflict.
For the fourth successive year in 2019, the highest number of annual casualties was caused by improvised mines (3,097). However, the number of recorded improvised mine casualties declined significantly from 2018, which saw an all-time high of 3,794 improvised mine casualties.\(^3\)

The significant upsurge in recorded casualties since 2014 is primarily due to large numbers of casualties in relatively few countries with intensive armed conflicts, involving the large-scale use of improvised mines. Countries with high and increasing numbers of casualties are mostly those with improvised mine casualties.

Improvised mines caused over one third of all child casualties in 2019 (594). In 2019, women and girls were less likely than men and boys to survive improvised mine explosions.

Note: all charts refer to data for casualties where the age, gender, or survival outcome was recorded in each case.

In many countries where armed violence is prevalent, media reporting and other sources do not clearly identify the type of explosive item causing casualties. The term “landmine” is often used both for improvised mines and other mine types. These casualties are recorded by the Monitor under “unspecified mine types.”\(^4\)

Victim-activation is the common element of all mine types recorded in the Monitor casualty data, including improvised mines and other unspecified mine types that may include improvised mines. The number of improvised mine casualties has been under-reported due to being recorded by various stakeholders as other unspecified mine types, or among undifferentiated mine/ERW categories.

Afghanistan, Iraq, and Yemen have significantly over 100 km\(^2\) of antipersonnel mine contamination, comprising both legacy contamination and new contamination, including improvised mines.

In addition, the following States Parties need to clarify their status with regards to improvised mines and their clearance obligations:

- In Burkina Faso, the use of IEDs including pressure-operated improvised mines has been recorded since 2016.\(^*\)
- Cameroon originally declared that there were no mined areas under its jurisdiction and control, and its Article 5 deadline expired in 2013. Mines of an improvised nature have caused casualties, particularly in Cameroon’s northern districts along the border with Nigeria since 2014.
- Mali has experienced a significant increase in improvised mine incidents in the center of the country. It is not confirmed if there are antipersonnel improvised mine types.\(^*\)
- In 2011, Nigeria declared it had cleared all known antipersonnel mines from its territory. Since 2017, there have been reports of incidents involving improvised landmines. Nigeria was granted an interim Article 5 deadline extension in November 2020.
- Tunisia declared completion of mine clearance in 2009. There have been reports of casualties from improvised mines each year since 2016.

* The improvised mines causing casualties in Burkina Faso and Mali were believed to have acted as de facto “antivehicle mines.” According to Landmine Monitor 2020, only vehicles were involved in mine incidents in both countries, and no casualty occurred while individuals were on foot.
Developments in 2019 included:

• The Mine Action Programme of Afghanistan (MAPA) updated its national standards and introduced new standards for the clearance of improvised mines.

• In Iraq, the challenge of contamination by improvised mines and other IEDs, particularly in urban areas such as Mosul, led to the development of new standards on IED disposal.

• In Yemen, the United Nations Development Programme (UNDP) was planning to work with the Geneva international Centre for Humanitarian Demining (GICHD) to update and develop the Yemen National Standards.

Clearance and the provision of risk education about improvised mines can be sensitive in some contexts because they are used by parties actively engaged in conflict.

The IMAS definition of explosive ordnance encompasses the mine action response to IEDs, including improvised mines. However, it excludes improvised mines and other emplaced IEDs from the scope of mine action in areas where “active hostilities” persist. Active hostilities continue in most countries with improvised mine casualties. The effects of this exclusion on the operational pillars of mine action which address the impact—clearance, risk education, and victim assistance—has not yet been ascertained or widely discussed in the Mine Ban Treaty mechanisms.

States Parties affected by antipersonnel mines of an improvised nature all Mine Ban Treaty provisions apply as they do for all other types of antipersonnel mines. This includes undertaking survey and clearance and disaggregating by types of mines in reporting (see Oslo Action Plan, Action 21). States Parties that have reported on the clearance of improvised mines are: Afghanistan, Colombia, the Democratic Republic of Congo, Iraq, and Yemen.

In addition:

• Chad reported land contaminated with improvised mines, but not on land released;

• Somalia reported that it was working to record improvised mines within its database;

• Ukraine reported that there was no data on the type of explosive items found and destroyed.

Improvised mines are frequently found in urban and peri-urban areas in addition to rural areas. In urban areas, the threat can be more complex, and the boundaries between safe and unsafe areas are often less clear. Improvised devices can be found above ground in buildings, and in and around homes, and device types may vary from area to area. This creates challenges in terms of developing clear messaging regarding recognition of devices and unsafe areas. An International Mine Action Standards (IMAS) technical note (12.10/1) for IED risk education was drafted in 2018 to help address these challenges.

States with improvised mines in risk education messaging in 2019:

• Afghanistan
• Angola
• Bosnia and Herzegovina
• Burkina Faso
• Colombia
• Iraq
• Lebanon
• Libya
• Mali
• Myanmar
• Nigeria
• Pakistan
• Philippines
• Somalia
• Syria
• Thailand
• Ukraine
• Yemen

Note: States Parties to the Mine Ban Treaty are indicated in bold.