



# EXPLOSIVE REMNANTS OF WAR



ICRC

IN BRIEF



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## THE LETHAL LEGACY OF MODERN ARMED CONFLICT

Innumerable wars, including conflicts lasting just a few weeks, have left behind tens of thousands of lethal explosives that put civilians at perpetual risk of death or injury. In conflicts that have lasted years, the dimensions of the threat are considerably greater, with millions of unexploded bombs, shells, landmines, grenades and even missiles left for war-torn countries to deal with after the fighting has ended. Modern technology enables warring parties to rapidly deliver enormous quantities of explosive munitions, but it is local communities that have, for years afterwards, to live – and die – with the lethal legacy of explosive remnants of war (ERW).

In many cases, it will take decades to clear ERW; and then, only if the resources are available for making the effort. All too often, ERW claim the lives and limbs of innocent men, women and children.

The Protocol on Explosive Remnants of War, an international agreement concluded in 2003, requires the parties to an armed conflict to take concrete steps to reduce the dangers posed by these weapons. This treaty is an essential tool in efforts to minimize civilian deaths, injuries and suffering arising from modern warfare. Many States have joined the Protocol, but more work is needed to raise awareness of this treaty and to ensure that it is widely ratified and implemented by governments and armed forces.



E. Tollefson/ICRC

## A LONG-STANDING AND WIDESPREAD PROBLEM

Explosive remnants of war (ERW) have been a problem for many decades. At present, dozens of countries are confronting the long-term effects of these weapons. Afghanistan, Angola, Belarus, Cambodia, Iraq, Laos, Libya, and Viet Nam are among the countries that are seriously affected.

It can take years, even decades, to find and clear ERW. Many European countries are still removing weapons used in the Second World War. For example, in 2012 alone, the explosive ordnance disposal unit of the Hungarian Defence Force destroyed more than 45,000 pieces of ERW left over from that conflict. Belarus, Poland and Russia also continue to clear large amounts of World War II ordnance.

The wars of the 1950s, 1960s and 1970s have made South-East Asia one of the regions most heavily affected by ERW. It is believed that there are tens of millions of pieces of unexploded and abandoned ordnance in Laos alone. Nearly 80,000 pieces of ordnance were destroyed by clearance operations in 2012. The bombs

stopped falling in Laos almost four decades ago; since then, more than 50,000 people have been killed or injured by ERW, making Laos one of the most severely affected countries in the world.

Even brief conflicts can give rise to major ERW crises. For instance, at the end of the 2011 international armed conflict, Libya found itself contaminated by a large amount of unexploded and abandoned ordnance. The country was already enduring the effects of unexploded landmines laid during the desert battles of World War II, and of contamination resulting from armed conflicts with its neighbours in the 1970s and 1980s. In 2012, clearance organizations destroyed more than 240,000 pieces of ERW in Libya.

ERW are a foreseeable consequence of modern armed conflict; however, their devastating human cost can be greatly reduced if the international measures agreed by governments in the Protocol on ERW are implemented.



Adama Coulibaly / ICRC

## WHAT ARE EXPLOSIVE REMNANTS OF WAR?

The term ‘explosive remnants of war’ (ERW) describes the wide range of explosive munitions (unexploded or abandoned) that remain in an area after an armed conflict has ended. They include artillery shells, grenades, mortar shells, rockets, missiles and other forms of explosive ordnance.

The main threat is unexploded ordnance (UXO), a term used by clearance organizations to describe munitions that have been fired, launched, dropped, or otherwise used but have not exploded as intended. Civilians often believe that such weapons are harmless, when in fact they are often unstable and lethal, capable of detonating if touched or disturbed.

Abandoned ordnance (AXO) also pose a significant threat. These are explosive weapons that have not been used but have been left behind or dumped by a party to an armed conflict. In some recent conflicts, large stockpiles of weapons have been left unsecured and removed by civilians for scrap metal. Abandoned weapons have also been grabbed for use afterwards, in fighting.





## BROKEN LIVES

Survivors of explosions caused by explosive remnants of war (ERW) may suffer a range of injuries such as fragmentation wounds, burns, punctured eardrums and loss of sight; and they may also have to endure the amputation of one or more limbs. Some of these injuries can challenge the abilities of even the most skilful surgeons, as they are seldom seen in peacetime. Extensive physiotherapy is also required for an amputee to maintain a full range of movement and strength in what remains of the severed limb. After the wounds have healed, the difficult and time-consuming process of fitting an artificial limb can begin. The person will need to replace this prosthesis regularly throughout his or her life – every three years on average and even more often at first. The artificial limbs of children will have to be replaced every six months.

Besides their physical injuries, victims often endure psychological trauma. Losing a limb is a devastating experience, and may be accompanied by shame, loss of dignity and a drop in self-esteem. The surrounding community may contribute to this, by ostracizing disabled people or discriminating against them. Many victims therefore require psychosocial support, in addition to the vocational training, financial assistance and encouragement often needed to help them become financially self-sufficient.

Only the most fortunate receive this level of assistance, and many ERW victims do not receive adequate medical treatment. In a lot of affected areas, health-care systems are either inadequate or non-existent. In addition, accidents often happen in remote localities, far away from hospitals. The victims or their families may not be able to pay for appropriate care, equipment and rehabilitation. Many never get help because they live in insecure environments where travel may

Zunovnica, Bosnia and Herzegovina. A mother grieves for her son Eldar, who died at this spot in August 2008. Ten-year-old Eldar was playing with his sister (also pictured) in the stream, when he saw a grenade and picked it up. It exploded, killing him and wounding his sister.



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## A HEAVY TOLL

be restricted because the conflict is still going on, or because hospitals are in zones held by the adversary. To make matters worse, many of the affected areas may simply be too dangerous for humanitarian organizations to operate in.

ERW pose a particularly high risk to children. This may be because these objects are conspicuous, may have an interesting shape, and are often brightly coloured; and children may be tempted to examine or play with them. Children may be less likely than adults to know that such objects are explosive.

When a man, woman or child is injured or killed by explosive remnants of war (ERW), it is, of course, tragic; but these weapons also have a severe socio-economic impact. The direct economic repercussions for an individual affected by ERW, and for his or her family, may include loss of income combined with the significant additional cost of short-term and long-term medical care.

ERW can also hinder the development and reconstruction of war-torn communities. The presence of these weapons often deters people from returning to their homes after conflict and slows down the rebuilding of houses; it can also make it impossible to use public spaces and schools. Repairing infrastructure and restoring essential services such as electricity, clean water and sanitation is far slower and more costly when ERW must first be cleared. Such adverse conditions discourage external investment, further impeding socio-economic development.



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Farming can also be heavily affected. Contaminated land diminishes the capacity of communities to feed themselves. Because ERW can penetrate below the surface of the soil, making them impossible to see, farmers are particularly at risk. Cattle and other animals are also at risk from these weapons, further reducing a community's means of subsistence.

Despite their knowledge of these dangers, people often have to live with the threat of ERW in conflict and post-conflict settings. Going to work or to school, growing crops, transporting goods, foraging: all these are risky activities under the circumstances, but many people have no choice but to carry on with them. Necessity drives people to till farmland despite knowing that they might detonate unseen munitions, or to rummage through mounds of abandoned ordnance in search of scrap metal to sell.

The price that they pay is often high. In Laos, for example, estimates suggest that about 36 per cent of accidents occur while people are collecting wood or engaged in agricultural work.

ERW also exact a heavy toll from the society as a whole: for instance, in the form of lost productivity, due to premature death or disability. Persons wounded and disabled by these weapons are often a heavy burden on the public health sector, already struggling to function with scarce resources.





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## ASSUMING RESPONSIBILITY: THE PROTOCOL ON EXPLOSIVE REMNANTS OF WAR

For decades, explosive remnants of war (ERW) were regarded as just another unfortunate by-product of armed conflict. The States affected were frequently left to fend for themselves, and most were unable to do so adequately. In many cases, local communities had to live with this threat for years on end.

In 2000, the International Committee of the Red Cross (ICRC) launched a call for a new international agreement on ERW. The cause rapidly gained support among non-governmental organizations and many governments. Following work by government specialists, and after negotiations amongst States, the Protocol on Explosive Remnants of War was adopted on 28 November 2003 and entered into force on 12 November 2006. It is the fifth Protocol annexed to the Convention on Certain Conventional Weapons.

The Protocol is the first multilateral treaty to deal comprehensively with the problems caused by unexploded and abandoned ordnance.

The Protocol does not apply to landmines, booby-traps and other similar devices, which are covered by earlier IHL instruments, specifically the Anti-Personnel Mine Ban Convention and Amended Protocol II of the Convention on Certain Conventional Weapons. It does, however, apply to unexploded or abandoned cluster munitions, for those States that are not party to the Convention on Cluster Munitions, which was adopted in 2008.



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The Protocol on Explosive Remnants of War requires each party to an armed conflict to take the following measures to reduce the threat posed by ERW:

- **Clear ERW in territory it controls after the end of active hostilities.**

Removing ERW on the ground is the most reliable way of eliminating the risk that these weapons pose to civilians. Unfortunately, clearance is a costly and dangerous undertaking that often requires specialized training, expensive equipment and considerable time. Importantly, the Protocol sets out provisions for all States Parties to assist affected countries.

- **Provide technical, material or financial assistance to facilitate the removal of ERW left over from its operations and situated in areas it does not control. This assistance may be provided directly to the party in control of the territory or through a third party such as the United Nations, international agencies or non-governmental organizations.**

While it is general practice in modern warfare for the parties to be responsible for clearing ERW in the territory under their control after the fighting has ended, the question of each party's responsibility for clearing its ordnance from territories it does not, or no longer, controls had never before been clarified. Often, those in control of territory contaminated by ERW lack the means or the capacity to clear the weapons themselves.

The Protocol is an important development in this respect. Each party must take steps to facilitate the clearance of its ordnance that has become ERW beyond its borders. To fulfil this obligation it may, for instance, provide the other party with clearance equipment, engage non-governmental organizations or other competent organizations to conduct clearance operations, or contribute funds to the United Nations or other agencies for the clearance of ERW in the country affected.



- **Take all feasible precautions to protect civilians from the effects of ERW.**

It can take years before ERW are cleared and, in the meantime, other measures must be taken to reduce the risk of civilian death and injury. Precautions such as the marking, fencing and monitoring of territory affected by ERW, the posting of warnings, and risk education can help people live safely in a contaminated environment.

- **Record information on the explosive ordnance used by its armed forces during the conflict and share that information afterwards with other parties to the conflict and organizations engaged in ERW clearance or conducting programmes to warn civilians of the dangers of these devices.**

Clearance of ERW and other measures must begin as soon as possible after the end of active hostilities. However, if these activities are to be conducted successfully, detailed information is needed on the explosive ordnance used and the ERW situation in the territory affected. Recording and sharing this information will

facilitate the rapid launch of clearance and risk-education activities. The kind of information to be provided is listed in the Protocol's technical annex; it includes the type and amount of explosive ordnance used, the location of the areas targeted, identification methods, and procedures for safe disposal.

- **In addition to the obligations placed upon the parties to a conflict, all States Parties in a position to do so must provide assistance for the marking and clearance of ERW, risk education, and the care, rehabilitation and social and economic reintegration of victims.**

The Protocol expects all States Parties to play a role in addressing the issue of ERW. It calls on all States Parties to help minimize the dangers facing civilians. This also includes contributing to the care, rehabilitation and socio-economic reintegration of ERW victims. Although the subject of assistance for victims is not specifically covered in the Protocol itself, the States party to the Protocol adopted a plan of action in this area in 2008. The plan outlines a number of specific actions that States Parties are encouraged to take to assess the needs of



Franco Pagetti/ICRC

ERW victims and to develop programmes and policies, so as to facilitate the provision of adequate care and support.

The Protocol provides a clear framework that can facilitate a rapid response to ERW. If implemented in good faith, it can go a long way towards addressing the issue.

Although the Protocol's rules apply only to future conflicts, States already affected by ERW when they become a party to the treaty are accorded "the right to seek and receive assistance" from other States Parties in dealing with ERW. The Protocol requires States Parties that are in a position to do so, to provide this assistance.

### **An important advance, but not enough**

The adoption of the Protocol on Explosive Remnants of War is an important step forward. However, its provisions are mainly remedial in nature; they will facilitate efforts to deal with ERW when a problem arises. Additional measures are urgently needed to prevent explosive ordnance from becoming ERW in the first place. This may involve increasing training for personnel using or handling ordnance, improving manufacturing and transport procedures, and making fusing mechanisms in certain munitions more reliable. In these fields the Protocol encourages States Parties to voluntarily exchange information with a view to promoting and establishing "best practices."



Kirkuk, Iraq. Taha, who is 27 years old, lost his legs when an anti-vehicle mine exploded near him. The ICRC helped him to open a small food shop, which, gradually, developed into a social centre for internally displaced people living in the area. "Nothing feels better than owning your own business," he says.



Pawel Krzywicki/ICRC

## AN APPEAL TO RATIFY AND IMPLEMENT THE RULES ON EXPLOSIVE REMNANTS OF WAR

More States must adhere to the Protocol on Explosive Remnants of War, and its rules implemented as a matter of urgency, in order to reduce the number of new victims each year. The existence of weapons capable of delivering huge amounts of explosive ordnance across great distances means that the threat posed by explosive remnants of war (ERW) will become more and more pressing unless the measures called for by the Protocol are universally applied. The International Red Cross and Red Crescent Movement has called on all States to consider adherence to the Protocol on Explosive Remnants of War and to the Convention on Certain Conventional Weapons and its four other protocols, if they are not already party to these instruments.

ERW constitute a serious and persistent problem for countless people. With the adoption of the Protocol, the Anti-Personnel Mine Ban Convention and the Convention on Cluster Munitions, the international community has created a comprehensive framework for addressing the threat posed by explosive weapons left on the battlefield, the "weapons that can't stop killing." However, the goal of protecting civilians and affected communities will be reached only when these instruments have achieved universal acceptance and become normal practice for governments, armed forces and armed opposition groups.



The ICRC has prepared materials to help States understand the Protocol and, more generally, the Convention on Certain Conventional Weapons. These include the texts of these treaties, a kit with model instruments of ratification, and documents and a video explaining the ERW issue and the Protocol for a non-specialist audience. These materials can be found on the ICRC website ([www.icrc.org](http://www.icrc.org)) or obtained from ICRC delegations and National Red Cross and Red Crescent Societies. Further information is also available from the ICRC's Arms Unit in Geneva.

Explosive remnants of war are a widespread problem affecting many countries. The photos used in this publication were taken in Afghanistan, Azerbaijan, Bosnia and Herzegovina, Côte d'Ivoire, Iraq, Laos, Lebanon, Libya and Mozambique.

## **MISSION**

The International Committee of the Red Cross (ICRC) is an impartial, neutral and independent organization whose exclusively humanitarian mission is to protect the lives and dignity of victims of armed conflict and other situations of violence and to provide them with assistance. The ICRC also endeavours to prevent suffering by promoting and strengthening humanitarian law and universal humanitarian principles. Established in 1863, the ICRC is at the origin of the Geneva Conventions and the International Red Cross and Red Crescent Movement. It directs and coordinates the international activities conducted by the Movement in armed conflicts and other situations of violence.



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