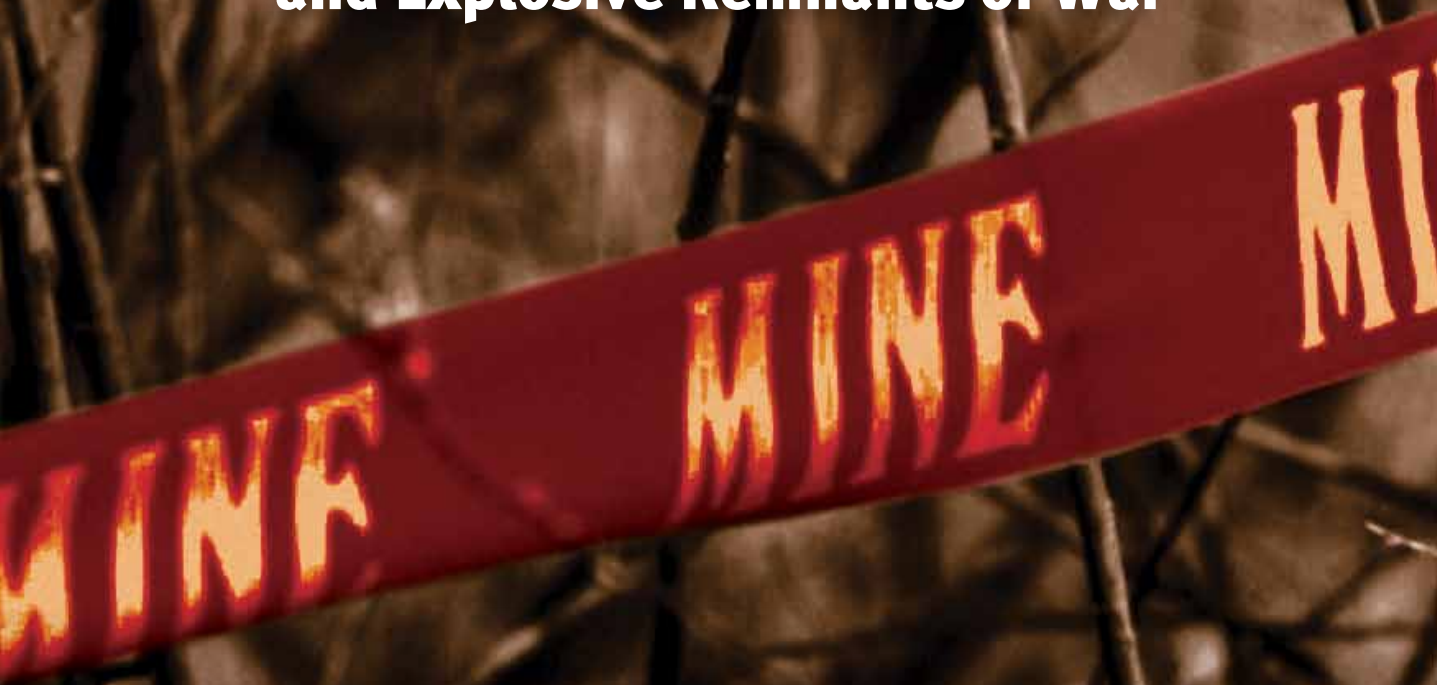




CROATIAN RED CROSS

HANDBOOK

**Learning to Live with the Danger of Mines
and Explosive Remnants of War**



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Learning to Live with the Danger of Mines and Explosive Remnants of War

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Foreword

The first edition of the Handbook for instructors in the Croatian language “Learning to Live with the Danger of Mines” (“Naučiti živjeti s opasnošću od mina”) was published by the Croatian Red Cross in 2006 according to the recommendations of the UN and based on the practical experiences of representatives of the ICRC who had worked in the Republic of Croatia for many years. The second, extended edition of the Handbook in the Croatian language “Learning to Live with the Danger of Mines and Explosive Remnants of War” (“Naučiti živjeti s opasnošću od mina i eksplozivnih ostataka iz rata”) was updated in 2015 in the light of new insights into the Mine Action system.

The first edition of the Handbook in English “Learning to Live with the Danger of Mines and Explosive Remnants of War” was abridged with regards to its content and the number of pages. The knowledge gained in the course of work of the Croatian Red Cross might prove useful to those who, unfortunately, need it in the countries contaminated by mines and explosive remnants of war.

The Croatian Red Cross thanks its contributors for updating the first edition of the Handbook in English “Learning to Live with the Danger of Mines and Explosive Remnants of War”.

Vijorka Roseg

Preface

In over two decades, coordinated and systemic efforts of all stakeholders of the Croatian mine action system, combined with international support and partnership resulted in notable achievements best evidenced by significantly fewer suspected mine suspected areas. According to the first estimates, mine suspected areas covered 13,000 km². In 2005, after systemic collection of data, available maps and information, it was established that these areas cover 1,174 km².

Today, mine suspected areas cover 277.8 km² across 49 towns and municipalities. Achievements that deserve particular mention are the establishment of a formal framework and a stable market of demining operations, which greatly affected the safety of pyrotechnicians and users of areas cleared of mines, and also resulted in the recognition of the Republic of Croatia as one of the countries with an advanced and exemplary system of mine action.

In addition to these impressive and important achievements, we have also been successful in acquiring grants from European Union funds for the purpose of funding demining operations. Moreover, our system is internationally recognised, we use modern and advanced methods, and have highly professional, trained personnel.

Finally, together with continual preventative and targeted education and distribution of information on the danger of mines to the local population and general public, the system of marking mine suspected areas and the developed e-services accessible to everyone have greatly contributed to a significant decrease in mine incidents and accidents to a point of their almost complete eradication, which is, after all, the most significant achievement.

It is precisely because of the extreme importance of education and distribution of information on the danger of mines within the framework of mine action that I applaud the preparation and publishing of this Handbook. It is especially significant since it is intended to help other countries facing the problem of mines, with which Croatian experts responsibly and professionally share the knowledge and experience they have acquired.

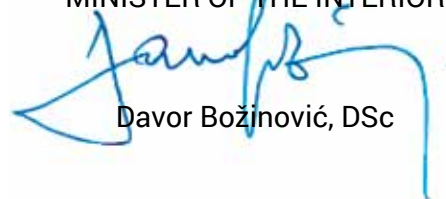
In the context of international cooperation and provision of support to the countries in need of it, I would point out Croatia's truly significant contribution to the relevant international treaties and conventions.

This comprehensive Handbook, full of information and remarkable illustrations, will surely contribute to better perception of the danger mines pose, as well as to achieving the prerequisite of safety.

I am certain we will continue our joint efforts to rid Croatia and the world of the dangers of explosive remnants of war.

Sincerely,

DEPUTY PRIME MINISTER AND
MINISTER OF THE INTERIOR

A handwritten signature in blue ink, appearing to read 'Davor Božinović', is written over the typed name. The signature is stylized and fluid.

Davor Božinović, DSc

Introduction

Mines are still one of the major threats to human life. Due to their longevity, which is over 50 years, mines threaten generations of people and also injure and kill civilians in about 80% of the cases. Data provided by the United Nations (UN) show that the danger of mine casualties for civilians is ten times higher after the end of an armed conflict than for soldiers during the armed conflict. At the end of the 20th century, mines were often used with the aim of isolation or expulsion of the civilians, spreading the horrors caused by the use and threat of this deadly weapon.

The remnants of mines restrict the movement of the population, access to roads, arable land and water sources more difficult, cause health and environmental repercussions. Mine injuries mostly occur in the productive years of life, which leads to a decrease in the number of people able to work and human suffering. Mine activity leads to decreased stability of a country by slowing down its economic development and social progress of the community.



Although no one knows the exact number, estimates show that approximately 120 million different types of mines and several millions of unexploded ordnances (UXOs) from previous or current conflicts remain hidden in approximately 60 countries (e.g. Afghanistan, Angola, Bosnia and Herzegovina, Cambodia, Croatia, Egypt, Mozambique). The largest number of mines lies in wait in Africa (approximately 37 million mines in 19 countries), while countries such as Afghanistan, Angola and Cambodia each have almost ten million mines.

The Republic of Croatia is among the countries with the largest number of mines and explosive remnants of war (ERW) in Europe which have been laid during the Homeland War (1991-1995) and threaten the local inhabitants. Luckily, the number of the mine suspected areas and mines has been decreasing year after year.

According to the latest data of the Ministry of the Interior of the Republic of Croatia, in December 2020, the total surface area of the mine suspected areas equalled 277,8 square kilometres and covered areas in eight (out of 21) counties: Karlovac, Lika-Senj, Osijek-Baranja, Požega-Slavonia, Sisak-Moslavina, Split-Dalmatia, Šibenik-Knin and Zadar, as well as in 49 towns/cities and municipalities. In this area, 17 500 mines and UXOs could be found.



1. Identifying Mines and Explosive Remnants of War

1.1. Mines in General

Mine warfare has a long history that spans the period from the Middle Ages to the modern times. It is believed that the word “mine” is of Gaelic origin “*meina*”, and the adjective mineral, meaning “metal ore”, derives from it. The term “mine” originated from the military tactic of filling tunnels with explosives close to the enemy lines with the ability to cause an explosion from a safe distance.

The first, improvised precursors of the today’s mines were used as early as the 15th century, while the mines which detonate by way of pressure first appeared in the American Civil War in the 19th century. With the discovery of gunpowder and its chemical formula, mines started to be used in World War I in the 20th century, as a precursor of all types of firearms.

During World War II, technological development lead to an increase in the production of large amounts of various types of mines, which resulted in mines becoming a very effective and cheap weapon. Advances in technology of mine manufacturing (metal, plastic) resulted in new options (smaller size, waterproof) and ability to quickly cover large areas with mines, for example by dropping them from airplanes (Vietnam).

Generally speaking, mines are explosive devices intended to kill and disable human beings and destroy vehicles. Every mine comprises a body, an explosive substance and a fuse. The main characteristic of mines is almost paradoxical as they differ from other conventional weapons (for example, ammunition). Mines detonate and explode due to proximity of activity or direct contact with the victim - “victim-actuated” and injure persons or animals and damage vehicle.



According to the location where they are laid, we differentiate between landmines and naval mines, which cause powerful explosions and have a large range. Mines

can be buried in various types of soil, but they can also be laid on paths, roads, railway tracks, in abandoned areas, rivers and seas.

A properly laid mine is impossible or very difficult to notice, but the effects of weather conditions (rain, drought, wind) can expose it so that only the top or edge of the mine is visible. Soil erosion or snowmelt can cause mines to change their position, appearance and colour. Changes in the river water level or floods can cause “movement of mines”. Most commonly, based on their purpose, landmines are divided into anti-personnel and anti-vehicle mines.

Anti-personnel Mines

Anti-personnel mines make up 83% of all types of mines and are intended to injure or kill people. They are commonly laid randomly and with no record-keeping, which is why they are particularly dangerous for civilians. Based on the manner of their detonation, anti-personnel mines can be divided into anti-personnel blast mines, anti-personnel fragmentation mines (stake and bounding) and booby traps.



Anti-personnel blast mines are buried below the ground or laid on the ground, but usually they are buried three to five centimetres below ground and are triggered by someone stepping on them (by standing or pressing them) and applying about two to four kiloponds of pressure. An anti-personnel blast mine can be triggered by an adult or child, as well as a smaller animal such as a dog.



Anti-personnel fragmentation mines are laid on the ground or above it (usually with the help of a stake put in the ground), and are almost always well hidden somewhere in nature by vegetation or rocks, both when laid individually or in groups. Most commonly, they are triggered by pulling, releasing or breaking the tripwire serving as an obstacle, whereby they explode and scatter hundreds of small destructive metal fragments, which simultaneously kill or heavily injure a larger number of people (at a distance of 50 to 100 meters).

Booby traps are explosive devices deliberately placed to injure or kill persons in unexpected circumstances (for example, when opening a door or window). Most

commonly, booby traps are connected to “disguised objects” which attract people’s attention (toys, clocks). They are triggered by and will set off at the smallest touch or movement of the object connected with a wire and in the immediate vicinity. Almost any object can become a booby trap or remnant explosive device. Over the recent years, there has been an increase in the use of improvised explosive devices (IEDs) in terrorist operations.

Anti-vehicle Mines

Anti-vehicle mines are designed to stop and destroy enemy armoured or vehicles (trucks, tanks). They are laid individually or in groups (minefields) on roads and paths, but they can also be found in wider areas such as meadows, pastures, fields, etc. They are usually triggered by applying between 120 and 150 kiloponds of pressure (a car, a tank, a larger animal such as a horse).



In the Homeland War in the Republic of Croatia, mines were laid on the borders, frontlines and areas of strategic importance, although the main criteria for laying mines often changed. In some areas, “mixed minefields” (with anti-personnel and anti-vehicle mines) were especially dangerous, but the mines laid were predominantly anti-personnel mines (80%), as opposed to anti-vehicle mines (20%).

Every year, approximate three million new mines, which are still manufactured in some countries, are laid across the globe. The manufacturing of one mine is relatively cheap and costs are between USD 3 and 30. However, its removal costs between USD 300 and 1 000. According to the estimates of the UN, it would take 1 100 years and USD 33 billion to completely remove approximately 100 million active mines in 70 countries.

1.2. Explosive Remnants of War in General

Explosive remnants of war (ERW) are unexploded ordnances, which, unlike mines, usually explode when they hit the ground. Sometimes they do not explode and remain abandoned on the site of their fall or buried in the ground for a number of years, after the end of conflict on the sites where the war took place. They can detonate when touched, moved, hit or removed, at any moment.

Explosive remnants of war have a lethal reach between 300 and 1 000 meters and come in various shapes, sizes and colours, which can change over time. Discarded weapons and UXOs (grenades, cluster bombs or hand grenades, ammunition) can be found on landfills or in abandoned areas. They can also be hidden in grass and parks, or in lakes and rivers. Even uncontrolled possession of arms held at home can be dangerous, especially for children.



REMEMBER!

**NEVER TOUCH MINES OR EXPLOSIVE REMNANTS OF WAR.
NEVER THROW ANYTHING ON MINES OR
EXPLOSIVE REMNANTS OF WAR.**

2. Marking of Mine Suspected Areas

During the Homeland War in the Republic of Croatia, mines were mostly laid without following the expert rules and keeping records and were used by the parties to the conflict to stop each other's progress and secure the positions of the armed forces or paramilitary forces. Since most of the mines are buried or well hidden, it is difficult to find them.

A mine suspected area is any area where there is reasonable suspicion of mine or explosive ordnance contamination or where there is suspicion of contamination and which is thus not used to ensure safety of life and work. Mine suspected areas and mined areas can be:

- Sites that used to be frontlines, checkpoints, trenches, bunkers;
- Sites that used to be warehouses, military facilities and plants;
- Sites where there are remains of animal carcasses and bones;
- Abandoned or destroyed buildings, houses;
- Marked mined areas;
- Abandoned vehicles;
- Electrical power and water supply sources in disrepair;
- Railway tracks and bridge pillars in disrepair;
- Overgrown paths, roads, woods, orchards;
- Overgrown shoulders of roads, ditches, channels, embankments, rivers.

REMEMBER!

NEVER GO TO MINE SUSPECTED OR MINED AREAS.

2.1. Official Marking

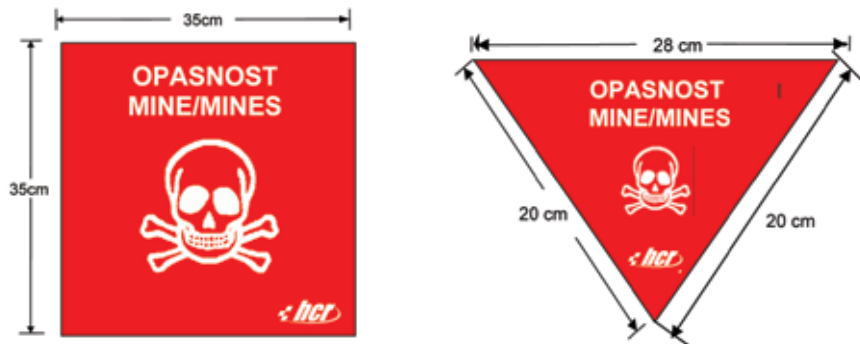
Marking mine suspected areas represents a set of measures and activities carried out to create a clear border between a safe area and a mine suspected area or a mined area. The aim of this is to timely inform and warn of danger, and in this way prevent persons, livestock and vehicles from entering a mine suspected areas.

Officially (permanently and temporarily) marking an area means providing a visual warning or a physical obstacle to movement of persons, vehicles and livestock in the sites with access to a mine suspected area. Official signs warning of the danger of mines have to be clearly noticeable and visible from a distance of 30 to 50 meters and able to endure all weather conditions in the period of one to five years.

A large sign warning of the danger of mines (a 80 cm x 60 cm rectangular board) has to be visible and clearly recognisable from a distance of at least 50 meters. This is the basic manner of marking a mine suspected area as a clear visual warning of great danger of mines. Such signs warning of the danger of mines are put up in visible and accessible places near mine suspected areas where movement of people is expected with the aim of warning them and prohibiting access.



Small signs warning of the danger of mines represent a clear visual warning of the danger of mines. They are put up in visible places and are clearly recognizable from a distance of at least 30 meters. Such signs warning of the danger of mines come in the form of small rectangular red boards (with 35 cm sides) and small triangular red boards (with two 20 cm sides and one 28 cm side).



Marking with a mine fence represents a visual and physical obstacle to the movement of persons, livestock and vehicles and is used in safe areas within settlements (near schools, kindergartens, playgrounds and other buildings). A mine fence is made of pillars connected with three rows of wire, to which small signs warning of the danger of mines are attached.

A sign warning of the danger of UXOs represents a visual warning used to mark and warn the population of danger. Official signs for the dangers of mines include:

- A large rectangular white board with the warning: DO NOT APPROACH – GREAT DANGER OF MINES IN THIS AREA, above which is a red triangle with the symbol of a skull and crossbones and the warning: MINES;
- A small rectangular red board with the symbol of a skull and crossbones and the warning: DANGER OF MINES;
- A small triangular red board with the symbol of a skull and crossbones and the warning: DANGER OF MINES;
- A tape (white, yellow, red) with the warning: MINES;
- Mine fence.



During an armed conflict, signs warning of the danger of mines may be put up by members of the armed forces and the police. In the Republic of Croatia, official signs warning of the danger of mines are put up and removed by pyrotechnicians of the Ministry of the Interior who also control, re-erect and renew the signs put up. The mine suspected areas in the Republic of Croatia are marked with 11 000 signs warning of the danger of mines and explosive remnants of war. Official marking for mine suspected areas includes the following:

- Putting up signs warning of the danger of mines, as well as mine fences;
- Putting up signs warning of the danger of UXOs;
- Re-erecting the missing mine fences and signs warning of the danger of mines;
- Removing or moving mine fences and signs warning of the danger of mines after finishing the activities of searching or demining.

Unauthorised persons are not allowed to move, damage or remove signs warning of the danger of mines nor are they allowed to enter a mine suspected area. Any person entering a mine suspected area or using a building for which no Certificate of Excluding the Area or Building from a Mine Suspected Area has been issued may be fined for committing a misdemeanour.

2.2. Improvised Marking

Improvised (unofficial) marking is used to warn the local population of the danger of mines and explosive remnants of war until the moment official signs are put up. Improvised signs warning of the danger of mines and explosive remnants of war are made and put up by the locals themselves who know from experience, which areas are dangerous.



These signs can be seen during or after an armed conflict, before demining and official marking begin. Improvised signs warning of the danger of mines and explosive remnants of war include various resources on hand:

- Wooden stakes to which a plastic bag or a piece of cloth is tied;
- Piles of broken off, crossed branches on the road;
- Metal crosses along paths or roads;
- Piles of rocks;
- Boards with handwritten warnings of mines.



REMEMBER!

**REMOVING AND DESTROYING SIGNS WARNING OF THE DANGER OF MINES IS A CRIMINAL OFFENCE.
ENTERING MARKED MINE SUSPECTED OR MINED AREAS IS A CRIMINAL OFFENCE.**

3. Behaviour and Notifications

3.1. Risk-taking Behaviour

Real-life examples show that many mine incidents happen because of risk-taking behaviour. People living near mine suspected areas sometimes expose themselves to unnecessary risks by going to mine suspected and dangerous areas because they are incautious or ignorant. Such behaviour of individuals can also endanger innocent by-standers, and the reasons for this may be various.

Elderly persons are often reluctant to change their routines as they decided to continue to carry out their everyday work such as farming after the end of the war. Adult men often believe that if “they survived the war, they will also survive the peace”, since they have some military experience and think they know everything there is to know about mines and that nothing can happen to them. Tourist curiosity can also be fatal for unwitting visitors.

Younger persons know that there is a certain risk, but do not believe that there is a possibility of an unfortunate outcome when they go to mine suspected areas to research or collect “military memorabilia”. Children do not understand the consequences of risk-taking behaviour because they are unable to assess the gravity of the situation and their curiosity pushes them to investigate unfamiliar areas and objects. Also, they don't have sufficient knowledge about the possible danger that may lead to an accident.



Although many civilians are aware of the danger they are exposed to, they often enter mine suspected areas and risk their lives in search of food (nomads, hunters, farmers). One of the main reasons which increases the risk of civilian casualties is “*the civilian dilemma*” – an existential (economic) need, such as gathering fruits

and kindling wood or finding water. It should not be forgotten that mines can also kill livestock, which can threaten the survival of some families.

3.2. Appropriate Behaviour

If you are travelling through an unknown area and you believe that there may be mines, always carefully look for any official and/or improvised signs warning of the danger of mines and explosive remnants of war. If you are travelling through an area you have never visited before or have not visited in a long time, make sure to be well informed and careful. Ask the locals and the competent authorities which areas are safe. Follow well-trodden paths and roads, do not take shortcuts or untrodden paths which seem not to have been taken by anyone else. Pay attention to the obstacles placed on paths and roads. If you find a suspicious object attracting attention, consider the possibility that the area might be mined or that the object was intentionally placed there as a booby trap. Mark the spot where you saw mines or explosive remnants of war, notify the competent authorities and remember:

- Do not investigate unfamiliar areas;
- Do not attempt to demine or remove explosive remnants of war by yourself;
- Do not collect mines or explosive remnants of war;
- Do not approach mines or explosive remnants of war.



Mine Misconceptions

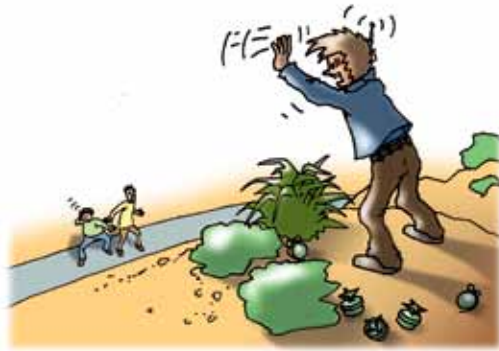
People repeat mine misconceptions which are not true. For example, burning vegetation in mined areas is not effective because only some mines might explode, but not all of them, and the remaining mines might become even more dangerous and make demining more difficult. The most common mine misconceptions are:

- Driving fast through a minefield will reduce the chance of triggering mines;
- Walking on your tiptoes through a minefield will reduce the chance of stepping on a mine;
- Mines laid a few years ago do not have a destructive effect;
- When you step on a mine, you will hear a click before the explosion;
- Following in someone's footsteps ensures a safe passage through a minefield;
- Mines cannot be triggered in winter when there is snow and ice.

Conduct in Mine Suspected Areas

If you see mines or explosive remnants of war, you are probably in a mine suspected or a dangerous area and should follow these instructions:

- Stop moving immediately and do not walk or move;
- Do not panic and remain calm;
- Carefully think through any actions before taking them;
- Do not try to leave the dangerous area;
- Warn others in your vicinity that you are in a dangerous area;
- Call and yell for help;
- Wait for somebody to arrive.



If you have found mines or explosive remnants of war, call and notify the European Emergency Number 112.

3.3. Notifying

The Geneva International Centre for Humanitarian Demining (GICHD) has drawn up a standardized international Information Management System of Mine Action (IMSMA), which is used to collect and systemize data and to plan mine action. The Republic of Croatia has its own Mine Information System (MIS) for mine action, which is a uniquely developed application in the whole world, providing each user with information and insight into the mine situation, showing the positions of signs warning of the danger of mines on the territory of the whole country.

REMEMBER!

**IF YOU SEE MINES OR EXPLOSIVE REMNANTS OF WAR,
CALL THE EUROPEAN EMERGENCY NUMBER 112.**

4. Consequences of Mine Incidents

4.1. Mine-related Public Health Problem

Mines injure or kill and cause grave consequences, but luckily not all mine incidents always result in casualties. Mine injuries are different from injuries caused by other conventional weapons because they are extremely severe, and their treatment is complex and expensive.

According to the ICRC, the cause and the consequences of the “*pandemic of mine injury*” has health, social, economic and political significance and usually impact the most vulnerable people in the community. Most of the mined areas are located outside urban areas, so many mine victims are located in the most remote areas at the time of their injury. Evacuation of victims from a mined area can be difficult or delayed, and transportation to the nearest health service can take a long time (by truck, motorcycle, on a horse) because it involves roads which are difficult to travel.

The survival of mine victims often depends on the help available (fast evacuation, immediate first aid, urgent transportation to a hospital) during the first few hours after the mine incident, while the rest of the medical care depends on the treatment and rehabilitation. The accompanying psychological trauma is often caused by the severity of the mine incident and the injury itself. Among war injuries, the largest number of amputations is caused by anti-personnel mines. The victim mortality is high; it is between 40% and 50%.



According to most of the studies conducted globally, men are more frequently injured by mines, usually between ages 15 and 64, while approximately one third (30%) of victims are women (10%) and children (mostly boys) under the age of 15 (20%). Children are especially vulnerable to injuries caused by mines because in their play they do not notice the danger, and the placed signs warning of the danger of mines can be useless for them (they are young and illiterate). It is more difficult for children to recover from and

survive mine injuries because their vital organs are closer to the explosion at the moment of injury. Most children under the age of 15 die before they reach a hospital.

At the 51st WHO Assembly held in May 1998, it was concluded that the use of anti-personnel mines causes injuries with have tragic consequences for civilian populations; thus, the Resolution 51.8 was adopted, declaring the damage and consequences caused by anti-personnel mines a public health problem. The Resolution calls for a specific public health response to anti-personnel mines and a better assessment of the health effects of mines on people to lighten the overall burden of mines and their effect on people's health. All countries are invited to resolve the problem of mines and develop a comprehensive, integrated and common public health approach which cannot discriminate against mine victims in comparison to other persons injured in other circumstances.

In the Republic of Croatia, from 1991 until the end of 2019, 2 008 persons were involved in 1 374 mine incidents, and 523 of those persons were fatally injured. The 69 children were involved in mine incidents, and 12 of those children with fatal injuries. Since 2004, no child was injured by a mine in the Republic of Croatia. After the end of the Homeland War, some mine incidents occurred due to the difficulties in demining (excavations, human error) and led to injury of pyrotechnicians (217 in total, of which 65 suffered fatal injuries).

Health effects caused by mines include increased healthcare needs not only of the injured population, but also of their families, which can additionally burden an already underdeveloped healthcare system over a short period of time in many countries. An indirect consequence can be that a large number of mine victims in a country causes changes in public health priorities, which may result in an increase in other diseases (cholera) or general mortality (lack of food and hunger).



4.2. Collecting Data on Mine Victims

Collecting data on mine victims may be difficult because mined areas are usually in inaccessible regions that may be affected by an armed conflict, so many mine victims are not officially registered. In some countries, which have no public health records, data on mine victims are insufficient.

In perhaps the worst mine crisis of the 20th century (in 1994), 2 000 people were killed or injured by mines every month (800 dead and 1 200 injured). According to the data from the 2018 Landmine Monitor Report (LMR), there were 6 897 victims of mines and explosive remnants of war (3 837 were injured and 3 059 killed, data for one victim is unknown). The data come from 50 countries around the world.



The systematic collection of data on mine casualties should be harmonized with international standards and adapted to the needs of each country. All data on incidents and victims (sex, age, activity) are very important for the development of appropriate mine action interventions. Information on mine victims are collected from various sources (non-governmental organisations, interviews, media, political, military and administrative institutions, the ICRC, national Red Cross and Red Crescent societies).

The Ministry of the Interior of the Republic of Croatia - The Croatian Mine Action Center has a mine victim database with collected data from various sources (UNMAS, the Ministry of the Interior, health institutions, the Croatian Red Cross, media) and it continuously works on restoring and organising this database.

4.3. Assistance to Mine Victims

According to the reports of the WHO, less than 10% of all mine victims across the world have access to health rehabilitation. Current physical rehabilitation centres are mostly located in urban areas, while mines are often placed in remote rural areas, where civilians fall victims. The travel to the centre can be expensive or dangerous due to an ongoing armed conflict or unrest. It is believed that almost all developing countries have some form of a rehabilitation service, although in some countries, many people (who are amputees) have never undergone physical rehabilitation, or they have to wait a long time to receive a new or replacement orthopaedic aid.

According to various data sources, there are approximately 450 000 mine victims in the world whose rehabilitation will cost more than USD 3 billion over the next ten years. According to the definition provided by the International Campaign to Ban Landmines (ICBL) from 1999: *“Mine victims are those who either individually or*

collectively have suffered physical or psychological injury, economic loss or substantial impairment of their fundamental rights through acts or omissions related to mine utilization."

Recovery of a traumatised victim in subsequent psychosocial rehabilitation depends on the provision of support to the family and the community in which the injured person lives. Rehabilitation of a single victim costs between USD 3 000 and 5 000 a month, which is a significant amount in developing countries and frequently exceeds demining costs.

Mine victim assistance is not limited only to the medical aspect related to trauma injuries caused by a mine explosion, but also includes subsequent physical rehabilitation, psychological support, social and economic reintegration of both victims and their families into the society.

Pursuant to Article 6 (3) of the Ottawa Treaty: *"Each State Party in a position to do so shall provide assistance for the care and rehabilitation, and social and economic reintegration, of mine victims and for mine awareness programs."*

The joint strategy of the WHO and the ICRC invites all countries to protect civilians against mines during and after an armed conflict within the framework of their own health and social care systems.

In the Republic of Croatia, assistance to the mine victims is always readily and promptly available, as is transport by an emergency vehicle and continuation of treatment in a hospital. Pursuant to the Constitution of the Republic of Croatia (Article 57 (2)): *"The state shall devote special care to the protection of persons with disabilities and their inclusion in social life."* The Republic of Croatia is a signatory to the Convention on the Rights of Persons with Disabilities of 30 March 2007, which the Croatian Parliament ratified on 15 August 2007.



5. Mine Action

According to the UN, Mine Action refers to a common approach to coordinating and solving mine problems, and it includes all activities aimed at eliminating and mitigating mine effects. There are five pillars of Mine Action which are important for safe living, and they include the following: demining (including surveys, reduction and marking of mine suspected areas); mine risk education; victim assistance and reintegration; advocacy; stockpile destruction.



According to the Geneva International Centre for Humanitarian Demining (GICHD), operational mine action (humanitarian demining) is considered to have a limited role in helping mine victims, but still contributes significantly to the needs of the population and victims, as well as to their social and economic reintegration. The United Nations Mine Action Service (UNMAS) globally coordinates and is responsible for all humanitarian crisis activities, regular actions, or peace operations in certain countries. At the proposal of the UN in 2005 - the April 4 of each year is globally observed as the International Day for Mine Awareness and Assistance in Mine Action.

Pursuant to the Mine Action Act (Official Gazette 110/2015, 118/2018, 98/2019), the Ministry of the Interior – Civil Protection Directorate – Croatian Mine Action Centre is competent for the organisation, implementation and coordination of Mine Action in the Republic of Croatia. Its integral part is the Centre for Testing, Development and Training (CTRO) aimed at encouraging, developing, researching and testing technologies and the quality of work of the Mine Action system.

5.1. Significant Mine Action Conventions

Anti-personal Mine Ban Convention (Ottawa Convention)

After many years of work by numerous international governmental and non-governmental organisations, the Resolution 51.45S was adopted at the UN General Assembly in 1996, calling on all countries of the world to ban anti-personnel mines as soon as possible. On 18 September 1997 in Ottawa, at the incentive of the Canadian government, the representatives of 89 states signed the Anti-Personnel Mine Ban Treaty.

The ICRC was among leading advocates of the mine ban, as it was greatly influenced by its physicians and nurses who were taking care of thousands of persons injured in armed conflicts in hospitals around the world and who witnessed horrible mine-related injuries. The ICBL received the Nobel Prize in 1997 for the efforts invested in achieving that humane idea.



The Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction (Ottawa Convention), came into force on 1 March 1999, whereby the signatories committed to meeting their obligations within 10 years. The Ottawa Convention is truly unique as it was the first time in history that a treaty on a weapon ban, based on the principles of international humanitarian law, received the approval of various countries around the world, since it requested assistance to the victims of that weapon due to the horrible consequences for mankind (overall, 164 countries were signatories).

On 4 December 1997, the Republic of Croatia became the 12th signatory of the Ottawa Convention, which the Croatian Parliament ratified on 20 May 1998. Several years later, the Act on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction (Official Gazette 141/2004) was adopted. The Republic of Croatia met a portion of the commitments taken on by signing the Ottawa Convention when it destroyed the stock of 199 003 anti-personnel mines on three occasions at the designated polygons, allowing the Arms Control

Service of the Ministry of Defence to meet its commitments by 23 October 2002. The Republic of Croatia has been recognised as extremely successful in the application of the Ottawa Convention provisions. Despite all efforts, the second deadline for demining has been extended to 1 March 2026.



The European Parliament has also made political commitments to ban anti-personnel mines, and assistance is still offered in accordance with the set requirements. The European Community supports the member states in the implementation of the Ottawa Convention and is trying to build “*a world without mines*” where everyone is safe. Mines still pose a threat to the local and regional security by weakening the development of partnerships between the European Union (EU) states, whose goal is to reach “*zero mine victims*”.

Convention on Certain Conventional Weapons

By taking care of the many victims of armed conflicts, the ICRC seeks to mitigate the damage caused not only by mines, but also by explosive remnants of war. Thus, at the end of the 20th century, it invited all state signatories of the Convention on Certain Conventional Weapons (CCW) of 1980 to sign a new international agreement (Protocol V), which invited countries in conflict to clear UXOs and remnants of weapons threatening the population. The Republic of Croatia was one of the first five countries to sign Protocol V, which the Croatian Parliament ratified in 2004 (Official Gazette 11/2004).

Convention on Cluster Munitions

Convention on Cluster Munitions (CCM) is considered a particularly important international achievement, which stands out due to its exceptional commitment to victims. It is considered the most important disarmament agreement since the Ottawa Treaty. The Convention on Cluster Munitions came into force on 1 August 2010, when 77 states signed it. The Croatian Parliament ratified the Convention on Cluster Munitions on 5 June 2009 (Official Gazette 5/2009).



5.3. The Role of the Croatian Red Cross in Mine Action

Since demining is a complex and long process, preventive measures must be aimed at stopping the detrimental effects of the existing mines, and local communities should develop programs for education of the population on the danger of mines. In 1996, the ICRC started “a pilot project” – the Mine Risk Education (MRE) programme, in cooperation with the Croatian Red Cross. The importance of this project was confirmed by the Act on the Croatian Red Cross (Official Gazette 92/2001, 71/2010). This enabled activities for the protection of the population in order to prevent injuries and fatalities, with the aim of promoting awareness of proper and safe behaviour considering the danger of mines and explosive remnants of war.



Community Initiatives

Informing and educating the population on the danger of mines and explosive remnants of war is carried out by implementing regular activities (lectures, public events) in eight counties of the Republic of Croatia, i.e. in 37 local Red Cross societies located near mine suspected areas. It is especially important to pay attention to the target audience – vulnerable groups who are additionally exposed to the danger of mines or explosive remnants of war, as well as to all those who, due to their way of life and work, move or live close to mine suspected areas (hunters, farmers, mountaineers, fire-fighters, field workers). Lectures for children and the youth are age-appropriate and take place in primary and secondary schools.

At the initiative of the heads of the local Red Cross societies, new proposals are emerging in the course of work for implementation of events for the public aimed at directly disseminating safety messages regarding mines and explosive remnants of war in the community. Thanks to their accessibility and ease of organisation, such local projects (exhibitions, plays, sports competitions) spark the interest of children and adults gathering in town centres and surrounding areas.

Publicity (creation and distribution of brochures and leaflets) is an additional means to spread safety messages to reach as many people as possible, both locally and nationally, as well as via media (print, radio, TV, social media) in order to warn the population of the danger of mines and explosive remnants of war still present in the Republic of Croatia.



With the beginning of the Homeland War, many children were robbed of a carefree childhood, with places and playgrounds where they could freely play, become a memory. The original idea behind the local project of constructing a children's playground was born at the incentive of the Vinkovci City Red Cross in 2000. It soon spread to other parts of the Republic of Croatia in order to prevent casualties of children living near mine suspected areas.

So far, 88 playgrounds have been built with the funding from the Croatian Red Cross and various donors. Gifts for children such as hats or shirts with various messages about the danger of mines are made for the occasion of the ceremonial opening of each playground. The construction of playgrounds provides a sense of safety and

health care, which creates better living conditions for children and their parents in a community.

The strategy of the International Red Cross and Red Crescent Movement invites the ICRC to develop and implement a comprehensive program called “Weapon Contamination”, which supports national Red Cross and Red Crescent societies in their work in about 20 countries in Africa, Asia, Europe, South America, where the danger of mines and explosive remnants of war exists.



REMEMBER!

DURING TRAINING, IT IS FORBIDDEN TO TOUCH TRAINING SAMPLES OF MINES AND EXPLOSIVE REMNANTS OF WAR.

List of Abbreviations

CCM – Convention on Cluster Munition
CCW – Convention on Certain Conventional Weapons
CTRO – Centre for Testing, Development and Training
ERW – Explosive Remnants of War
EU – European Union
GICHD – Geneva International Centre for Humanitarian Demining
ICBL – International Campaign to Ban Landmines
ICRC – International Committee of the Red Cross
IED – Improvised explosive devices
IMSMA – Information Management System of Mine Action
LMR – Landmine Monitor Report
MIS – Mine Information System
MRE – Mine Risk Education
UN – United Nations
UNICEF – United Nations Children’s Fund
UNMAS – United Nations Mine Action Service
UXO – Unexploded ordnance
WHO – World Health Organization

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The Croatian Red Cross Mission

Acting in accordance with the fundamental principles of the International Red Cross and Red Crescent Movement, the Croatian Red Cross encourages volunteerism and solidarity, protects dignity, life and health, and helps a person in need without discrimination.



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