



European Union
Civil Protection and
Humanitarian Aid

A HIDDEN EMERGENCY

WHY EXPLOSIVE ORDNANCE CONTAMINATION
MUST BE ADDRESSED NOW IN NORTHWEST SYRIA

CONTENTS

Executive Summary	2
The Humanitarian Context	4
HALO's Response	5
The Impact of Explosive Ordnance Contamination	9
Next Steps	12
Conclusions & Recommendations	16
Acronyms	18
Definitions	18

Acknowledgements

This report is based on field research and operations conducted by The HALO Trust and implementing partners, Shafak, HiHFAD and iMFAD. It also draws on data available from the UN as well as a range of interviews and public reports. A list of acronyms and definitions are available at the end of this report. This research and report was part of a project funded by ECHO and HALO's achievements in northwest Syria have been possible thanks to funding from ECHO, the Governments of the United Kingdom, Netherlands, Belgium, and through the UN.

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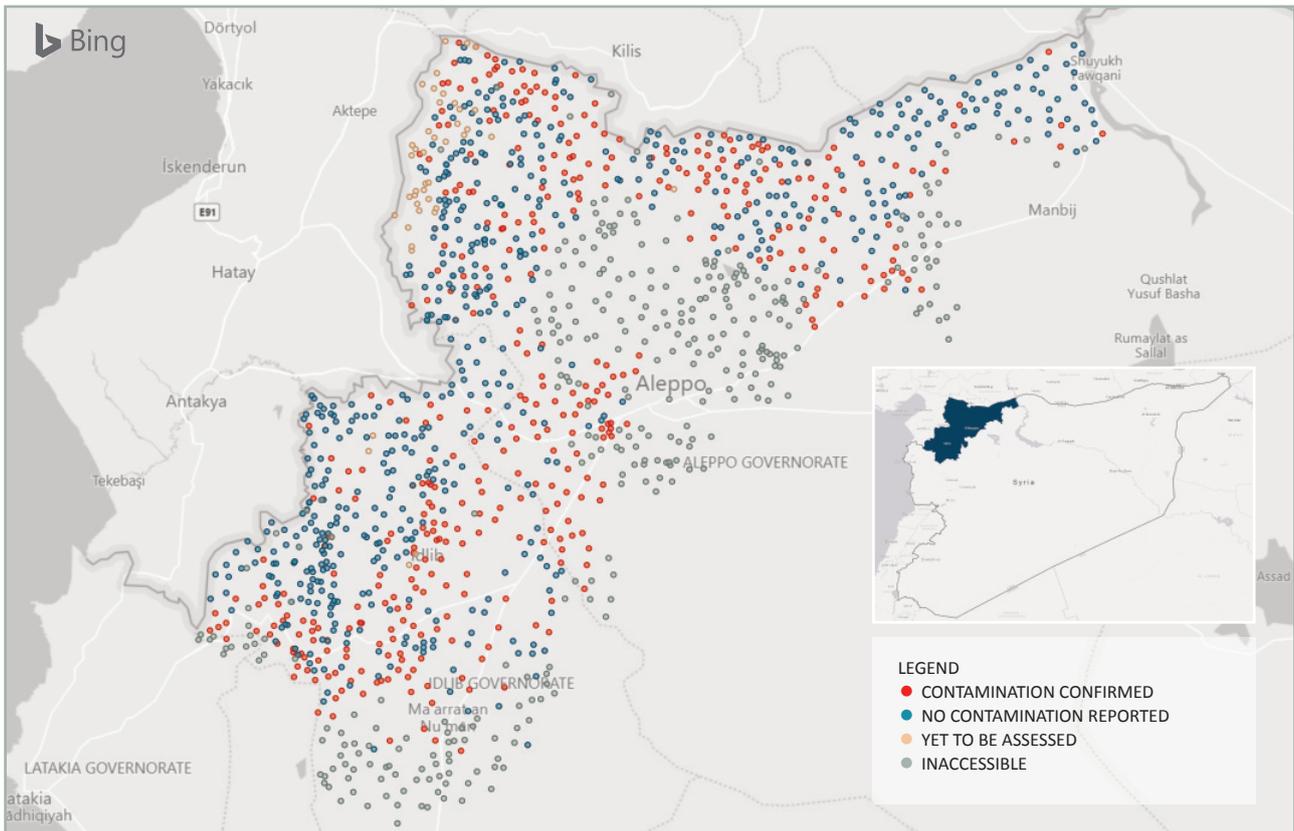
EXECUTIVE SUMMARY

Northwest Syria is facing an explosive ordnance contamination emergency as a result of the ongoing Syrian civil war. The debris of war is an additional hazard in what is already one of the world's largest and most complex humanitarian crises.

As an international humanitarian Non-Governmental Organisation (NGO), The HALO Trust (HALO) has been supporting the people of Syria through Explosive Ordnance Risk Education (EORE), Victim Assistance (VA) and the assessment of explosive ordnance contamination. Over the last two years, HALO has worked with national NGO implementing partners to assess almost 1,000 communities, completing the first comprehensive assessment of explosive ordnance contamination in northwest Syria.

This report aims to provide an overview of the findings from that assessment, make recommendations for next Humanitarian Mine Action (HMA) steps, and identify the support and coordination required from stakeholders. Some of the key findings are:





Map 1: Explosive Ordnance Contamination in Northwest Syria
 This map shows the identified explosive ordnance contamination with each dot representing a community targeted in this assessment.

- Explosive ordnance contamination is widespread and was confirmed in over 400 communities (41% of those assessed) as shown in map 1;

- A wide range of explosive ordnance is present including, rockets, grenades, projectiles, mortars, guided missiles, landmines and Improvised Explosive Devices (IED);

- Explosive ordnance is causing hundreds of accidents annually, with men and boys most affected;

- Submunitions from cluster munitions account for 36% of the total explosive ordnance found and cause 42% of the accidents;

- People are moving and gathering explosive ordnance items into perceived safe places, causing 10% of explosive ordnance accidents;

- In 73% of contaminated communities, agricultural land is blocked by explosive ordnance;

- Explosive Ordnance Disposal (EOD) and systematic clearance of hazardous areas is required to remove the explosive ordnance contamination;

- The ongoing conflict restricts the access that is necessary to implement activities in some areas.

This assessment has been completed in areas which can be reached safely by field teams. Communities that have not been assessed are in areas with ongoing hostilities, and likely have high levels of contamination. The results of this assessment are, therefore, a conservative estimate of the extent of contamination.

This assessment finds the needs currently far outweigh the support currently available. As such, HALO makes detailed recommendations at the end of this report for governing and local authorities, donors, United Nations (UN) agencies and mine action organisations. Coordination between these groups of stakeholders is critical in order to prevent further loss of life and to mitigate the wider impact of explosive ordnance on livelihoods. Support needs to be mobilised to implement the following principle recommendations:

1. Expand delivery of HMA activities relevant to emergency relief, including EOD, systematic clearance, EOORE and VA to reduce the preventable loss of life and limb;

2. Build on the initial explosive ordnance contamination assessment through further survey in northwest Syria;

3. Develop and implement a HMA strategic plan to guide near and longer term priorities, spanning the five pillars of HMA.



THE HUMANITARIAN CONTEXT

Now in its tenth year, the Syrian conflict is understood to be one of the worst humanitarian crises in the world. An unprecedented number of people have been forced to flee their homes, with 5.54 million displaced regionally and 6.2 million displaced internally¹.

Northwest Syria has been one of the most affected regions and continues to be the epicentre of the violence with over 100,000 incidents involving the use of explosive munitions². As can be seen in map 2, the area is divided between the control of four warring parties, with power and control shifting and fluctuating throughout the years of conflict³. Access to communities is essential for understanding their needs and providing humanitarian assistance, unfortunately this continues to be restricted by ongoing fighting and insecurity. As of March 2019, more than 11.7 million people are in need of humanitarian assistance, and an estimated 10.2 million people are living in areas affected by explosive hazards across Syria⁴.

The needs of people in northwest Syria are extensive and complex. With shifting populations and spontaneous returnees, the location and nature of their needs are difficult to monitor and meet. Through UN reports, it has been determined that those living in northwest Syria are particularly vulnerable. In this area, 4.2 million people are in need of humanitarian assistance, and 2.18

million are Internally Displaced People (IDP). At the same time, this area is seeing the highest percentage of returnees⁵.

Explosive ordnance poses a threat to existing and returning populations, and also threatens organisations providing humanitarian assistance. There is extensive evidence of widespread use of explosive weapons throughout the conflict, and although these incidents have been well documented, the full scale and nature of the explosive ordnance contamination is still being determined⁶. However, when considering the scale of the conflict together with expected failure rates of certain explosive weapons, heavy explosive ordnance contamination is unfortunately inevitable.

Accidents caused by explosive ordnance further exacerbate existing vulnerabilities by adding extra pressure on a health care system already devastated by the crisis and further weaken economic resilience. We have recorded over 3,500 explosive ordnance accidents in northwest Syria⁷, although this most certainly underrepresents the total number of accidents which have occurred⁸. Such accidents cause considerable physical, psychological and socio-economic harm, and require short and long term health and livelihood support.



HALO'S RESPONSE

Since 2016, HALO has coordinated operations in northwest Syria through partnership with national NGOs including, Shafak, Hand in Hand for Aid and Development (HiHFAD), and iMFAD⁹ providing cross border assistance from Turkey.

EXPLOSIVE ORDNANCE RISK EDUCATION

Often the first essential HMA intervention in a conflict zone is EORE, teaching adults and children what the risks are and safe behaviours in order to prevent accidents from occurring until the explosive ordnance can be cleared.

HALO's projects have conducted over 23,000 EORE sessions reaching almost half a million beneficiaries. In addition, train the trainer sessions have been conducted with other NGO workers and community focal points to spread the message further. In order to communicate messages effectively, varied approaches are used including: interactive group sessions (e.g. story-telling and puppet shows for children), distribution of leaflets, social media campaigns featuring case studies and cartoons, and local radio broadcasting.

VICTIM ASSISTANCE

HALO has been conducting Victim Data Collection (VDC) since 2016 in northwest Syria, and initiated a comprehensive VA programme in 2018, with a focus

on explosive ordnance accident survivors. HALO coordinates VA through partner organisations and is now the major supporter of three rehabilitation clinics, four prosthetic centres and five mobile outreach units. In the last 18 months alone, this project, funded by the EU, has provided 219 prosthetics and reached over 3,000 survivors with a combination of physiotherapy sessions, psychosocial support, peer support counselling, and multi-purpose assistance for 300 households. The combined approach of collecting victim data as part of wider activities from other projects, allows HALO to reach and refer more survivors for assistance.

HALO's implementing partners have collected data on 5,250 accidents and 6,405 victims of which 69% have been caused by explosive ordnance. With no official or coordinated reporting systems in place across northwest Syria, we would expect the true numbers of victims to be much higher. This indicates just how vast the contamination problem is and the significant risk it poses to the civilian population of northwest Syria.

This essential work provides individuals with life saving support. It also enables a better understanding of the extent to which explosive ordnance is causing accidents, how accidents are occurring and what types of explosive ordnance are causing the most accidents, as discussed later in this report under *Impact of Contamination*.

COMMUNITY ASSESSMENT

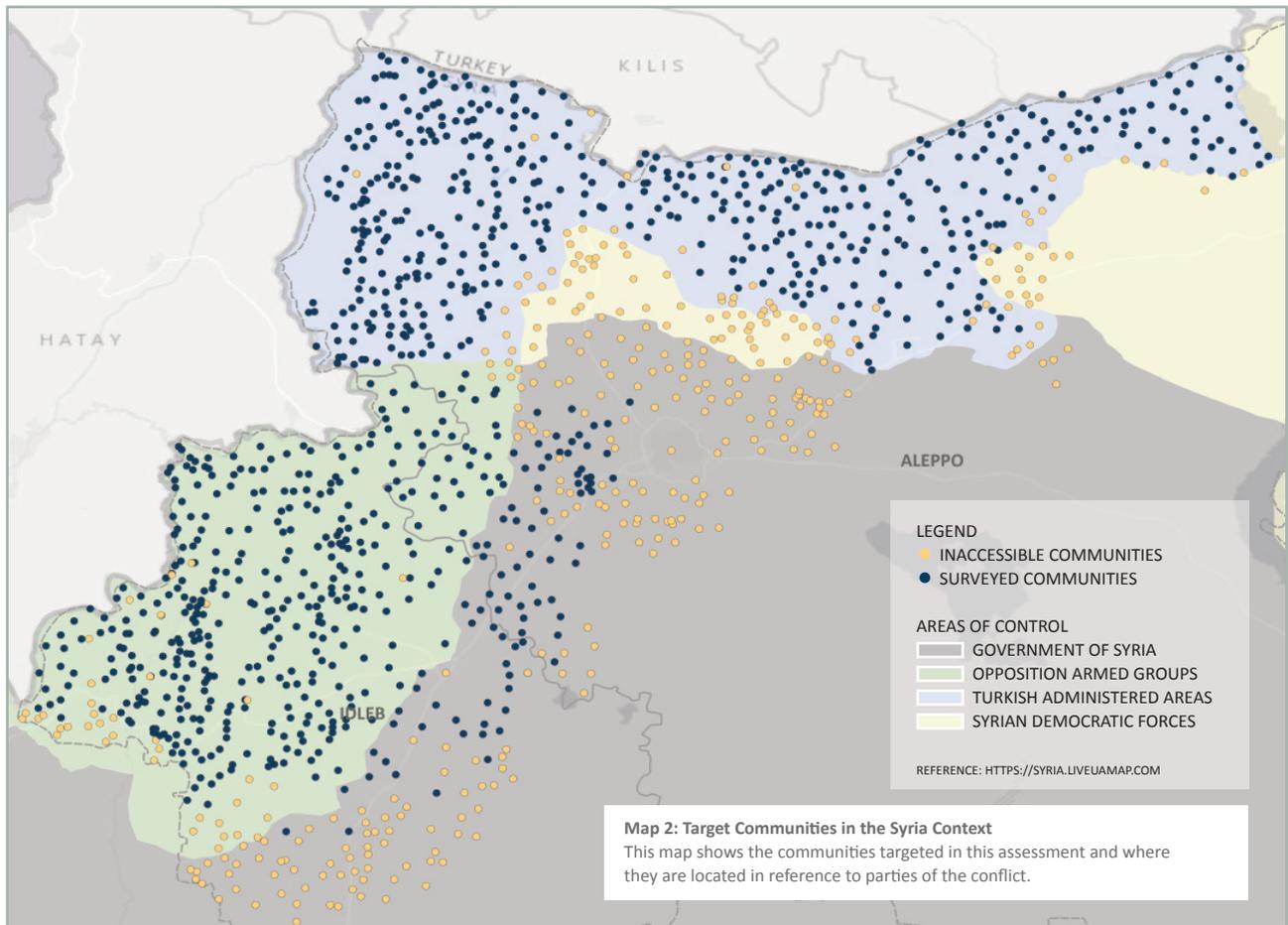
From late 2018 to 2020, HALO conducted an initial assessment of explosive ordnance contamination in northwest Syria in order to begin to understand the scale and nature of the threat. Through HALO’s implementing partners, the assessment deployed an average of 20 teams a month to target 41 sub-districts in northwest Syria and has reached 971 communities to date¹⁰.

Map 2 indicates the targeted communities reached through this assessment. Blue dots represent communities visited and orange dots indicate communities which were inaccessible due to security and safety restrictions. The map also illustrates the different areas of control. It is a complex context in which to work and there are limitations for humanitarian operators seeking to access at-risk communities.

HALO’s assessment confirmed contamination in 41% of the assessed communities, identifying 1.6 million people who are impacted by explosive ordnance. Information from the United Nations Mine Action

Service (UNMAS) offers an insight into consolidated HMA efforts, and indicates even higher contamination levels, with 55% of assessed communities reporting contamination¹¹. It should be recognised that this is likely to be a conservative estimate of the explosive ordnance contamination in northwest Syria, as many of the inaccessible communities are those which have experienced high levels of conflict and can be expected to be highly contaminated. In addition, during this initial assessment it was identified that 78% of the accessible communities had experienced prior conflict which indicates wider contamination than that so far confirmed.

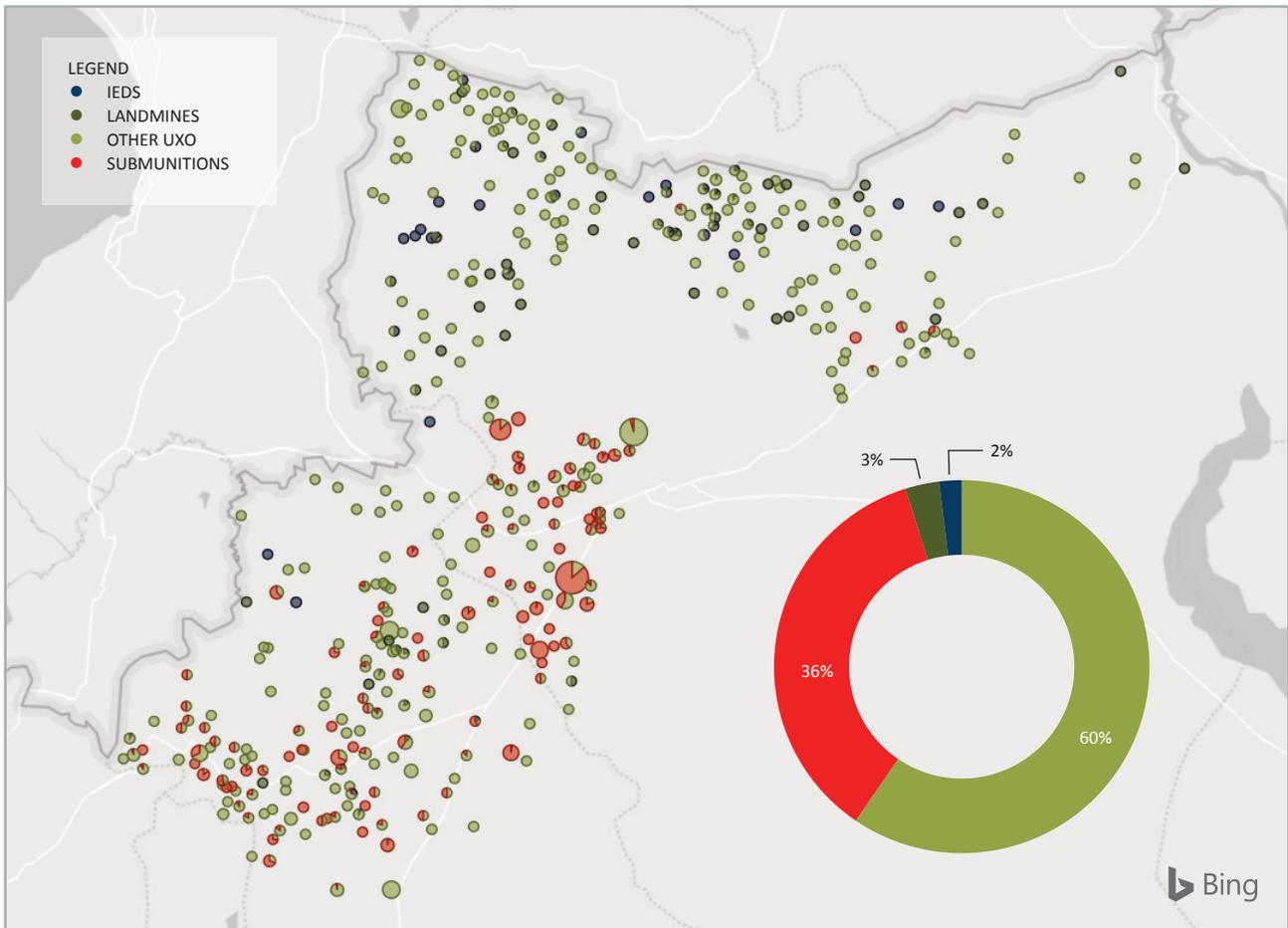
HALO’s implementing partners systematically assessed each neighbourhood by talking to community leaders, members and land users who advised on the known location and information of different explosive ordnance in the community. The purpose of these neighbourhood consultations was to determine the scale, nature and impact of explosive ordnance in each community. When community members reported items of explosive ordnance, locations were marked by field teams to raise awareness and reduce the risk of



971 communities assessed to date

41% of communities are contaminated with explosive ordnance

1.6 million people are living with the risk of explosive ordnance



Map 3: Explosive Ordnance by Contamination Type
 This map shows the nature and location of the contamination by representing the different types of explosive ordnance confirmed.

36% of hazards found were submunitions

future accidents. These multi-disciplinary field teams then conducted EORE within the contaminated communities, reaching people who are at the highest risk, including children. These mitigation measures are usually the first steps in a HMA response to the contamination problem by providing knowledge to at-risk individuals on how to remain safe when the threat of explosive ordnance is present.

The teams conducting this assessment are trained by HALO in the identification of explosive ordnance and are supported remotely by HALO’s EOD technical advisors. The teams have encountered rockets, grenades, projectiles, mortars, guided missiles, landmines and a wide range of IEDs – in addition to unexploded airdropped weapons including aerial bombs and cluster munitions, including the submunitions which they disperse.

The most frequently found type of explosive ordnance was submunitions (36%) with other items including landmines (2%), IEDs (2%) and a mixture of other Unexploded Ordnance (UXO) (60%) (see chart and map

3 above). As expected, the location of contamination follows where there has been fighting, with higher rates of occurrence generally near former and current conflict front lines. The nature of contamination varies across the northwest, as can be seen in map 3. There is a higher occurrence of cluster munitions throughout the southern part of northwest Syria and greater occurrences of landmines and IEDs in the far north.

Through this work, HALO was able to identify activities and behaviours which are putting community members at risk. For example, in many communities, explosive ordnance are being moved and gathered into locations such as wells and yards, and some people are collecting items together even in their own homes. For people who have had their houses destroyed by explosive weapons, people are left with no choice other than to attempt to clear the rubble and begin rebuilding. This rubble clearance is extremely dangerous as explosive ordnance is often found within the wreckage, and this activity has already been a major contributor to explosive ordnance accidents across Syria.



A HIDDEN EMERGENCY

The extensive use of explosives weapons in Syria has been well documented, as have subsequent civilian accidents. However, support to communities to address the remaining explosive ordnance risk has not been sufficient. In consideration of the complex humanitarian needs in Syria, HMA receives little attention or inclusion in programming, and as a consequence experiences relatively low funding. If the explosive ordnance problem in Syria is not addressed now, its legacy will persist, causing avoidable future loss of life and injuries, and it will continue impeding immediate and long-term humanitarian response measures.

The number of explosive ordnance accidents is incomplete and the full extent of explosive ordnance contamination is unknown. Currently not enough is being done and there is an inadequate HMA capacity in northwest Syria to remove the risk. Returning refugees and IDPs are particularly vulnerable as they don't know the location and nature of the risk when they move to host communities or return home.

The impact of explosive ordnance goes beyond injury and loss of life – it also affects livelihoods, the safe return of refugees, IDPs, and security. As some communities begin to rebuild and recover, there is a great need for early and ongoing HMA intervention to avoid an unnecessary extension of the explosive ordnance contamination problem.

- Casualties and fatalities of explosive ordnance accidents are going unreported

- Accidents will go up with returning populations and continued internal displacement

- Impact of explosive ordnance is interlinked with other humanitarian needs, Food Security and Livelihoods (FSL), Water, Sanitation and Hygiene (WASH) and Protection

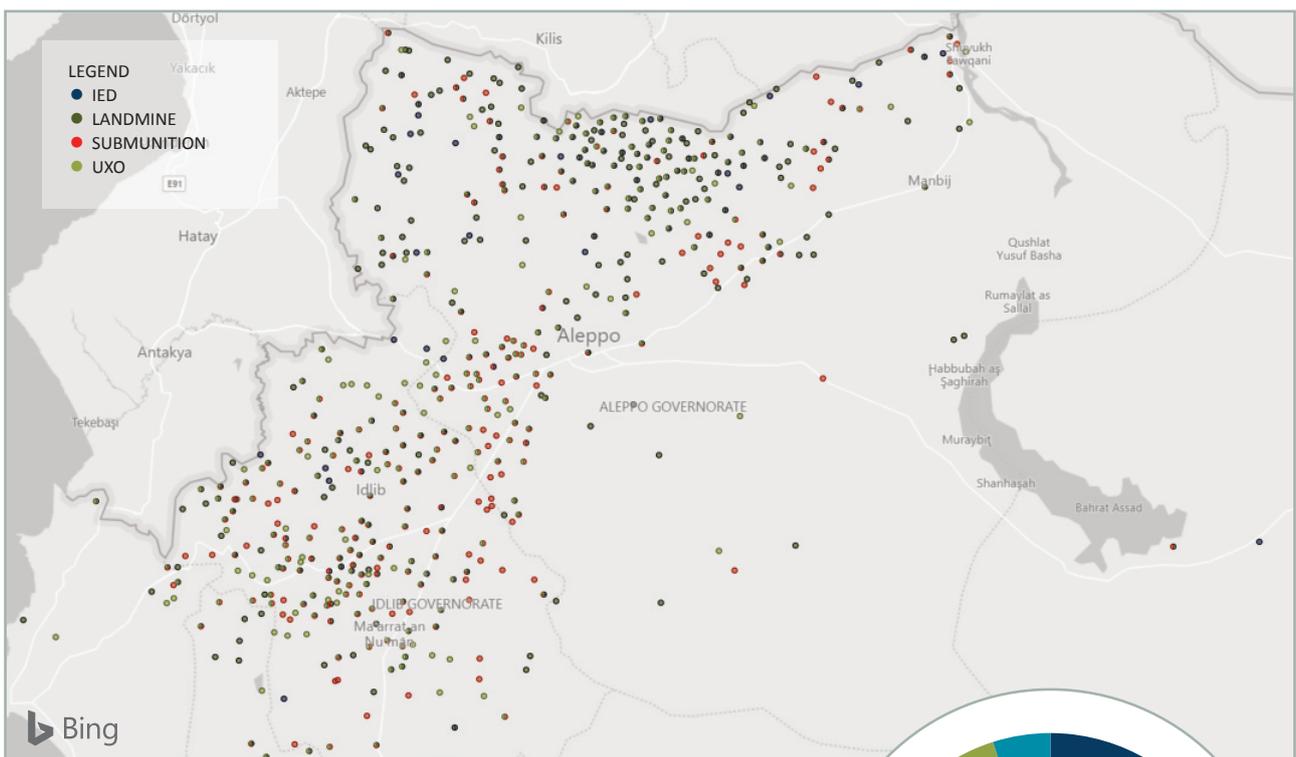
- The scale of the explosive ordnance contamination is still widely unknown

THE IMPACT OF EXPLOSIVE ORDNANCE CONTAMINATION

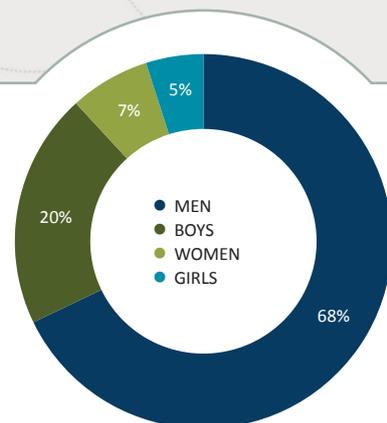
The impact of explosive ordnance is wide reaching and it poses an immediate threat to the civilian population. Hundreds of accidents are occurring annually in northwest Syria although due to a lack of official reporting, the numbers will be under reported. Children are frequently the victims of explosive ordnance accidents, representing 25% of the 4,427 victims interviewed by HALO. As shown in the chart below, men and boys are the most affected by explosive ordnance accidents, making up 88% of all victims. Of these victims, 61% were accidents caused by unintentional actions, however, 10% were a result of people moving explosive

ordnance items which had been found. This highlights the severe risk which explosive ordnance is creating and the urgent need for its clearance.

Different types of explosive ordnance cause accidents resulting in different types of injuries. The most common accidents are caused by submunitions at 42%, while other UXO cause 24% of accidents, and landmines and IED accidents account for 22%¹². It should be noted however, that fatalities are likely to be underrepresented and so these figures are indicative and do not represent the full picture.



Map 4: Causes of Accidents by Explosive Ordnance Type
This map shows the location and prevalence of explosive ordnance accidents and the types of items causing the accidents when known.



 25% of explosive ordnance accident victims are children

Explosive ordnance accidents often cause life changing injuries with arm and leg amputations common, requiring physical rehabilitation (including prosthesis) and psychosocial support, which need specialist and long term health care provision. The impact of explosive ordnance accidents also goes beyond the survivor or victim themselves and impacts the community and in particular, the family, who often shoulder the responsibility of care-taking and bread winning.

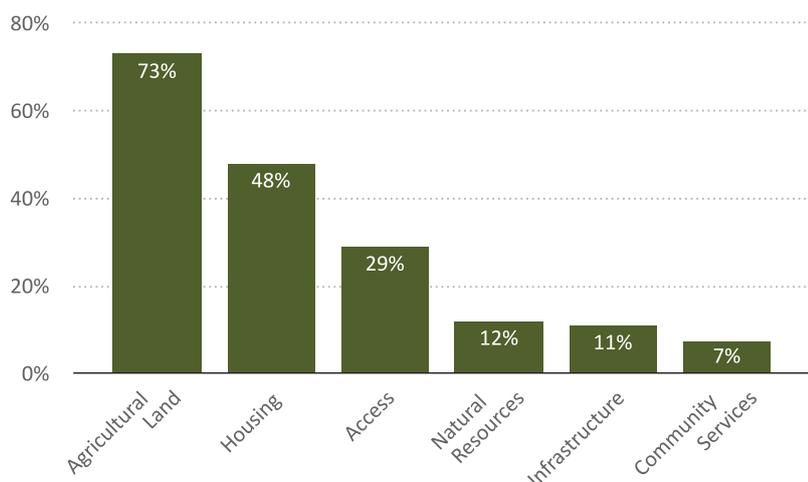
Explosive ordnance contamination and accidents also have a gendered impact in many different ways. It has been shown that female survivors of explosive ordnance accidents tend to suffer great stigma¹³ and that the economic impact on wives of male survivors, or those widowed, is far greater than when the situation is reversed. This compounds the already complex gendered impact of the use of explosive weapons and conflict¹⁴.

In addition to presenting a risk to life and limb, civilian accidents also affect livelihoods while adding pressures on a health system already stretched beyond its

capacity. Contamination can block access to basic services and infrastructure such as schools, water sources, hospitals and roads. A loss of access routes also restricts organisations providing humanitarian assistance, impeding survival and recovery, and compounding the impact of explosive ordnance. Furthermore, contamination in agricultural lands prevent their productive use, further affecting food security and livelihoods.

HALO's assessment of explosive ordnance contamination in northwest Syria found that 78% of affected communities reported that explosive ordnance is blocking the use of agricultural land, while 48% reported that contamination is restricting the use of housing. All of the communities reported that explosive ordnance contamination blocked one or more types of land, infrastructure or access. This shows how the presence of explosive ordnance exacerbates the chronic stresses on the community and the suffering caused by conflict. The chart below indicates the frequency of blockages created by explosive ordnance in contaminated communities in northwest Syria.

Type of blockages





73% of communities have agricultural land blocked



48% of communities have housing blocked

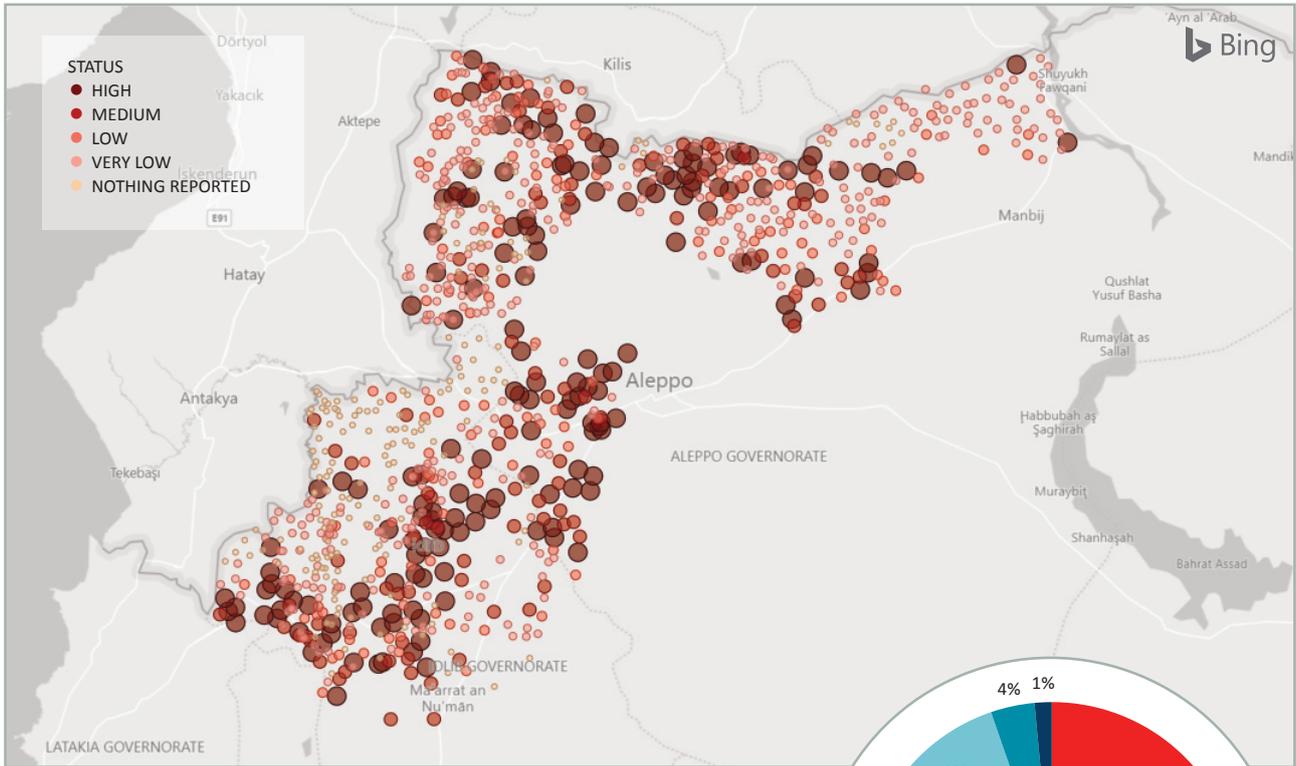
HALO has utilised the information collected throughout the assessment to grade communities and sub districts by different levels of risk severity which takes into consideration the following factors:

- Reports of explosive weapons use;

- Scale of the confirmed contamination according to the number of hazards found proportionate to the size of the community; and

- Types of explosive ordnance found (with certain items posing greater threat to the civilian population by their sensitive nature, such as submunitions, or by their lack of visibility, such as landmines).

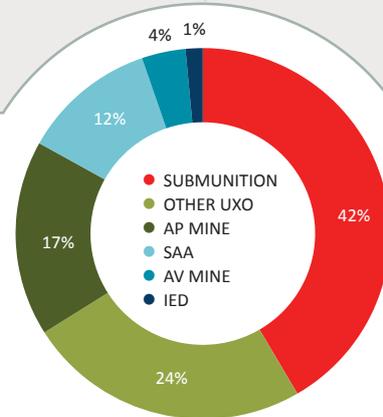
This categorisation is depicted in map 5 and allows for comparison with other humanitarian needs and reveals opportunities for synergies in programming with partner organisations. For example, 67% of people living in contaminated communities are already identified as People in Need (PIN) by the UN and therefore, require humanitarian assistance. The added impact of explosive ordnance contamination is likely to exacerbate these needs and restrict effective assistance. The simultaneous occurrence of these humanitarian needs should make up the indicators used for prioritisation by organisations providing assistance.



Map 5: Explosive Ordnance Level of Risk
 This map shows the level of risk from explosive ordnance in the communities assessed and gives a clear indication of the severity levels.

67% of people in contaminated communities are PiN

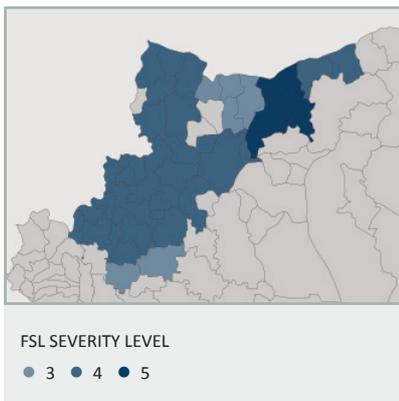
Causes of Accidents



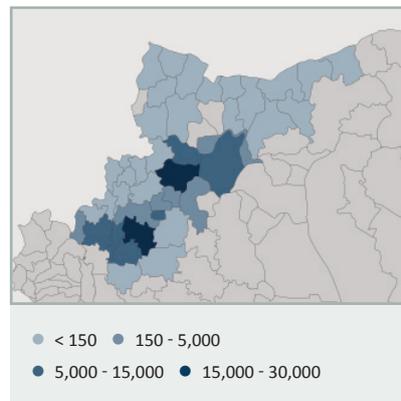
In the maps 6, 7 and 8, the overlap of other humanitarian needs and the severity of explosive ordnance contamination can be observed. It is possible to identify sub-districts and communities which are most in need and which will benefit from complementary forms of humanitarian assistance.

changing population creates an environment in which the impact of explosive ordnance contamination is likely to change, therefore requiring a dynamic response, extensive monitoring, and updated information dissemination. It also means the information available will be of critical importance when further explosive ordnance survey and clearance work commences.

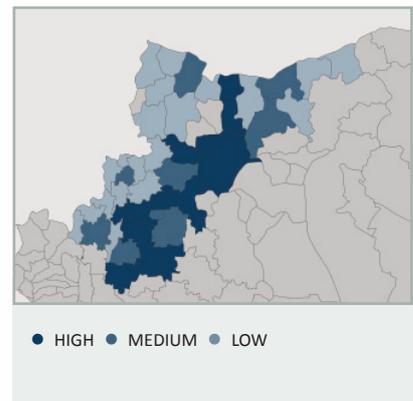
In northwest Syria, one of the complexities is the movement of IDPs and spontaneous returnees. The



Map 6: Food Security & Livelihood Needs
 This map shows the Humanitarian Needs Overview (HNO) severity levels of needs regarding food security and livelihood support for each sub district in northwest Syria.



Map 7: Number of Incoming Returnees
 This map shows the UN records of returning displaced people to their home communities. This is consolidated by sub district to show where is seeing the greatest number of returnees.



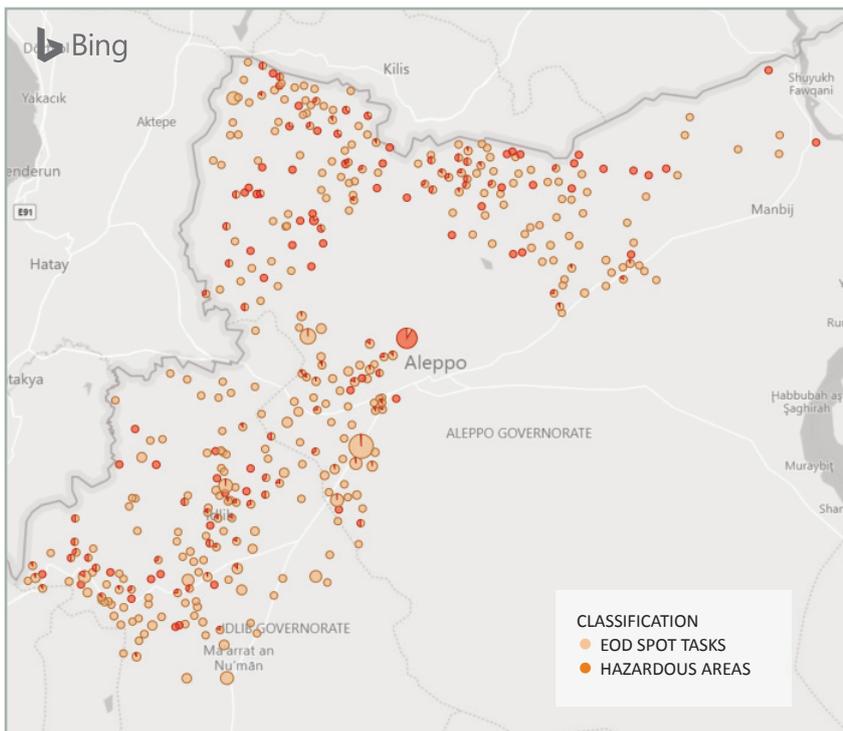
Map 8: Explosive Ordnance Contamination
 This map shows the explosive ordnance contamination identified by HALO's assessment and consolidating the levels of risk in each community to achieve a level of risk for each sub district.

NEXT STEPS

To protect and support the civilian population of northwest Syria, there is a need to continue and significantly expand HMA activities. HALO recommends that there be the immediate deployment of a minimum of 18, six-person, community liaison teams to conduct EOD, NTS, VDC and EORE. In addition 10, eight-person, clearance teams capable of mechanical and manual clearance methods should be deployed to systematically clear hazardous areas. As more is learnt about the needs of the communities and access improves, it is anticipated that capacity will have to expand further. There are two main barriers to conducting these activities, firstly there is an urgent funding shortfall (even to continue the current capacity); secondly, there is insufficient safe access to reach all communities.

The ongoing conflict presents challenges for the implementation of mine action activities but it does not completely prevent them. While there are some communities located in areas which are too dangerous for HALO to reach, there are others which will greatly benefit from the removal of explosive hazards and other HMA activities now. These communities which are able to receive emergency response and early recovery assistance, should not be left behind because others cannot be reached. In consideration of this and the extensive impact caused by explosive ordnance, the following next steps should be taken. These are listed in order of priority, however, the following activities can, and should, be implemented concurrently:

1. HIGH PRIORITY: SAVE LIFE AND LIMB THROUGH THE CLEARANCE OF EXPLOSIVE ORDNANCE ITEMS



Map 9: Explosive Ordnance by Clearance Type Required
This map shows the explosive ordnance identified by HALO divided into two groups of required clearance methodology.

Humanitarian EOD capacity should be deployed now as a priority to follow up on the explosive ordnance recorded through this initial assessment. Contamination can be sub divided into two categories for clearance considerations: hazardous areas and EOD spot tasks. It is recommended that the clearance of EOD spot tasks is prioritised which involves the disposal of single or multiple items of explosive ordnance located together. This will remove items from homes, gardens, streets and remove the immediate risk, especially to children. Of the 1,603 hazards identified in this assessment, 81% require EOD spot task removal and 19% are hazardous areas requiring NTS and systematic clearance in accordance with International Mine Action Standards (IMAS). Map 9

shows the distribution of hazardous areas and EOD spot tasks located to date by HALO.

This EOD will include the disposal of items within damaged infrastructure which have been identified as a significant barrier to safe reconstruction¹⁵. HMA organisations will need to bring their expertise in the use of armoured vehicles to deal with contaminated rubble. It is recognised that some of the items identified in HALO's assessment may have already been moved or destroyed by individuals, local groups or the Syrian Civil Defence¹⁶. However, operations managers,

EOD and survey teams will use the information and verify whether items have been moved or destroyed during the course of their follow-up activities.

In summary, the following HMA steps are recommended:

- Immediate deployment of humanitarian EOD capacity for spot tasks, reaching communities at highest risk;

- Early deployment of clearance capacity including mechanical assets necessary for the removal of contaminated rubble in urban areas.

2. HIGH PRIORITY: PROTECT AND EMPOWER PEOPLE BY EXPANDING VA AND CONTINUING EORE

In light of the growing number of victims of explosive ordnance accidents, continued and expanded support is needed for survivors and surviving family members. More outreach services are needed to support isolated survivors and all VA should be expanded to improve connections with livelihood support. A gendered and inclusive response to reach men, women, boys and girls and other marginalised groups is required, in particular to reach female survivors and those widowed by explosive ordnance accidents.

As VA is naturally interlinked with the wider health and disability sector, VA should be integrated into these broader humanitarian assistance projects. With high numbers of survivors from explosive ordnance accidents and from the conflict itself, a regional or national strategy is needed to provide survivors with access to healthcare, employment and support¹⁷. This must include trauma informed practice and be in line with human rights and the Convention on the Rights of Persons with Disabilities (CRPD), to which Syria is a signatory.

EORE is the most prevalent HMA activity taking place in northwest Syria, with HALO projects already reaching almost half a million beneficiaries. One area for improvement is the targeting of those who are at the

highest risk, including, men, boys and returning displaced people. In line with previous recommendations¹⁸, EORE should also be given to Syrian refugees in the region, to minimise the risks in host countries and prior to returning to Syria. EORE messaging can be informed from VDC data to target specific dangerous behaviours and utilise more ways of reaching people, such as through social media or via integration with other humanitarian assistance.

In summary, the following HMA steps are recommended:

- Expand VA outreach services to reach isolated survivors and marginalised groups;

- HMA organisations should advocate and contribute to a VA or wider disability strategy;

- Integrate EORE activities with other humanitarian assistance projects, in particular in areas where HMA operators cannot access, and across the region to reach refugees before they return to Syria;

- Improve EORE targeting of high risk people, in particular men, boys and returnees, with specifically designed EORE materials.

3. HIGH PRIORITY: MAXIMISE SOCIO-ECONOMIC IMPACT WITH IMPROVED UNDERSTANDING THROUGH FURTHER SURVEY

As is the case in other contaminated countries, detailed survey of explosive ordnance contamination is required to inform strategic and operational decision making. Survey is an ongoing process which helps to track changing situations and needs over time. It should be conducted in tandem with EOD, clearance, EORE and VA activities. This would include NTS which involves desktop analysis and field visits, working with community members to identify the type, location and total area affected by explosive ordnance contamination. From this, a detailed understanding of the nature and

scale of the problem is achieved which will inform effective planning of subsequent interventions and an insight into the required funding.

Survey will include the collection of socio-economic data to understand the impact of explosive ordnance contamination. It is critical that improved efforts are made now to understand the impact of explosive ordnance contamination, not later. Data must be collected to understand the varying impact that explosive ordnance has across different sub sections of

communities, between men, women, boys and girls, marginalised groups, and between static and moving populations. The impact of explosive ordnance in different situations must be understood, from causing accidents, to contaminating houses to agricultural land and beyond. Other pressures also increase risk-taking behaviour and this needs to be understood for the impactful deployment of EORE, VA, EOD, survey and clearance capacities.

A key point in the complex Syrian context, is the need to monitor the changing and emerging needs within affected communities, and HMA interventions will need to be agile and responsive based on data which has been collected. Therefore, the collection of more detailed socio-economic data through survey, VDC, and

from other organisations, is needed to understand in detail the impact of explosive ordnance contamination to target HMA activities to achieve the greatest humanitarian impact.

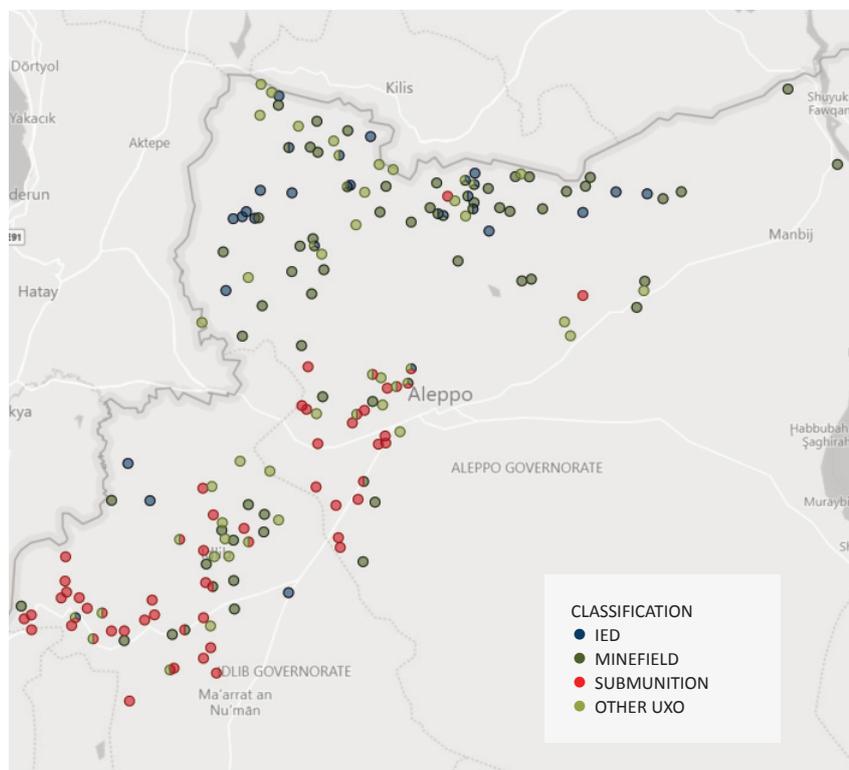
In summary, the following HMA steps are recommended:

- Continue survey of northwest Syria to gain a deeper understanding on the nature and impact of explosive ordnance contamination;
- Collect and utilise socio-economic data collection during survey and VDC to better understand the impact of explosive ordnance contamination to prioritise HMA activities.

4. HIGH PRIORITY: PROVIDE SAFE ACCESS AND ECONOMIC RESILIENCE BY CLEARING HAZARDOUS AREAS CONTAMINATED WITH EXPLOSIVE ORDNANCE

The hazardous areas identified in the initial assessment will require NTS and then systematic clearance. These areas are shown in map 10, and are disaggregated between the type of contamination which they contain: landmines, IEDs, submunitions and other UXO. These different types of contamination will require either hazardous area clearance or battle area clearance (BAC). BAC is usually a faster process as it deals predominantly with surface items while the clearance of subsurface landmines and IEDs will normally take longer.

Both an extensive BAC and mine/IED clearance capacity will be required. Noting the extent of the submunition contamination in northwest Syria from the extensive use of cluster munitions, and the increased likelihood of their potential to cause accidents, BAC of Cluster Munition Contaminated Areas (CMCA) should be prioritised. HALO's assessment to date, has focused on contamination in urban areas, and so it is expected that during the NTS process, further hazardous areas in agricultural, pastoral, and open areas will be identified.



Map 10: Hazardous Areas by Explosive Ordnance Type
This map shows the hazardous areas disaggregated by the type of EO contamination within them.

Further survey will enable sophisticated prioritisation and workplanning based on the multi-dimensional needs identified. Clearance of hazardous areas will clear access routes providing safe access to natural resources, community infrastructure, agricultural and pastoral land and housing. This clearance will reduce risk, save lives and provide economic resilience by increasing the safe productive use of land and provision of livelihoods.

In summary, the following HMA steps are recommended:

- Deploy large scale explosive ordnance clearance assets, following systematic prioritisation to maximise the humanitarian benefit.

5. MEDIUM PRIORITY: STRENGTHEN CAPACITY AND DIVERSIFY PARTNERSHIPS BY INTEGRATING HMA INTO WIDER HUMANITARIAN PROGRAMMING

Due to the protracted nature of the Syrian Crisis, there is a requirement to meet the immediate and long term needs simultaneously. The context remains complex, and structural and systemic barriers persist, there is a requirement for nexus programming to maximise the impact of HMA activities. This means including HMA assistance firmly into the broader assistance response. In particular, the activities of EORE, VA, EOD, and survey and clearance need to be integrated into protection; Water, Sanitation and Hygiene (WASH); health, and Food Security and Livelihood (FSL) programming. For example, EOD spot tasks within the debris of destroyed houses can be a part of early recovery reconstruction projects rather than a stand-alone HMA project.

HMA organisations are able to bring expertise and best practice for such activities which will strengthen local capacity, and if not included in such programming, leave significant risks for civilians and other humanitarian organisations leading such projects. Improved communication and coordination across the humanitarian sector will allow for these synergies and partnerships to be identified.

HMA interventions address chronic stresses and root causes of poverty and vulnerability in the community

by releasing productive land alongside humanitarian work that often addresses the immediate crisis. This synergy targets a wider systems thinking approach in relation to addressing all aspects of community needs from emergency response through to development and peace-building.

For areas which cannot be reached by mine action organisations themselves, risk reduction efforts must focus on partnerships with organisations possessing wider reach. For example, by including EORE messaging in food basket distributions or with COVID-19 awareness campaigns run by partner agencies.

In summary, the following HMA steps are recommended:

- Integrate VA into the broader health, disability and livelihood assistance sectors;
- Integrate EORE activities with other humanitarian assistance projects, in particular in areas where HMA operators cannot access, and across the region to reach refugees before they return to Syria;
- Integrate explosive ordnance clearance operations within emergency relief and early recovery projects simultaneously.

THE MULTI-DIMENSIONAL BENEFITS OF HUMANITARIAN MINE ACTION

HMA activities are able to directly impact the lives and livelihoods of people affected by conflict, across emergency response, recovery and development contexts. Such activities improve physical security by educating on and removing risk, as well as contributing to greater economic resilience by clearing contaminated areas and enabling people to farm lands, rebuild infrastructure and homes. Reaching the individual and the whole community, HMA's benefits include:

Risk reduction and the prevention of accidents

Enhanced livelihoods and food security through safe access to agricultural land

Improved access to resources and infrastructure

Enhanced livelihoods through the provision of jobs

Increased opportunities for early recovery through the removal of risks in housing and buildings

Safe access for the provision of other humanitarian assistance

Improved stability and a sense of safety

CONCLUSIONS & RECOMMENDATIONS

KEY CONCLUSIONS

With an initial assessment of explosive ordnance contamination in northwest Syria complete, there is now a need for immediate EOD capacity, systematic clearance and further survey to add to the ongoing VA and EORE. As the explosive ordnance contamination is so widespread and affecting lives and communities so extensively, the problem needs to be addressed now, with improved visibility of its impact and the response required. To achieve this, a significant uplift in donor funding is needed. The current capacity falls far below the need and is itself in risk of continuation due to funding shortfalls.

In order for resources to be allocated in accordance with the greatest need, and to incorporate HMA into wider humanitarian assistance provided in northwest Syria, a requirement exists for an increase in comprehensive explosive ordnance impact data collection, gathered through further VDC and survey. A thorough understanding of how, where and why explosive ordnance is (and is not) impacting communities is needed in order to plan and implement HMA interventions, ensuring the most impactful humanitarian assistance is provided.

Strengthened coordination in the humanitarian sector is essential for developing integrated programming and an improved humanitarian response. To contribute to this, socio-economic and technical data must be more visible across the HMA and wider humanitarian sector, and utilised in the broader programming directed at addressing humanitarian needs among affected communities.

To enable the above *Next Steps* to be achieved, this report is making three principle recommendations and four sets of subsidiary recommendations for stakeholders below:

1. Expand delivery of HMA activities relevant to emergency relief, including EOD, systematic clearance, EORE and VA to reduce the preventable loss of life and limb;
2. Build on the initial explosive ordnance contamination assessment through further survey in northwest Syria;
3. Develop and implement a HMA strategic plan to guide near and longer term priorities, spanning the five pillars of HMA.



RECOMMENDATIONS FOR GOVERNING & LOCAL AUTHORITIES

- Ensure HMA organisations and implementing partners can reach those communities with the highest humanitarian need and at the highest risk from explosive ordnance contamination;
- Facilitate engagement between the HMA sector and relevant authorities for agreement on access, training, cross border logistics and civilian/military cooperation in northwest Syria;
- Participate in and endorse a HMA strategic plan in northwest Syria, and recognise its necessary inclusion in the wider humanitarian response.

RECOMMENDATIONS FOR DONORS

- Review current assistance programmes to ensure the inclusion of HMA emergency response, including EOD, EORE and VA, to reduce the preventable loss of life and limb from explosive ordnance accidents;
- Contribute to improved availability of adaptive, longer term funding, to conduct further survey and systematic clearance, in order to avoid an unnecessary extension of the impact of explosive ordnance contamination;
- Include capacity building projects to strengthen the knowledge and participation of governing and local authorities in the HMA response;
- Provide flexible funding to deliver COVID-19 adjusted HMA activities.

RECOMMENDATIONS FOR UN AGENCIES

- Include HMA data in the calculation applied to People in Need (PIN), and UN Severity levels, to include the impact of explosive ordnance contamination;
- Advocate to local and governing authorities in order to improve access and the scope of the response;
- Seek ways and means to collect data and monitor explosive ordnance accidents, victims and fatalities across northwest Syria to understand the enduring threat;
- Support the development of a HMA strategic plan that will quantify the needs, and aid integration of HMA activities into the wider humanitarian response.



RECOMMENDATIONS FOR THE HUMANITARIAN MINE ACTION COMMUNITY

- Target immediate risk reduction needs first through EOD, while continuing to collect socio-economic impact and contamination data to better inform emergency response measures which target clearance in areas where the wider humanitarian need is greatest;
- Develop and improve VA and EORE activities to widen the reach and target those most at risk;
- Better integrate HMA into the broader emergency response and adopt linkages, by strengthening local partnerships and driving donor outreach and funding mobilisation;
- Improve the sharing and utilisation of explosive ordnance data with the broader humanitarian sector for the development and prioritisation of all activities;
- Participate in the development of a HMA strategic plan and advocate for continued support of HMA activities.

ACRONYMS

CFP	Community Focal Point
CMCA	Cluster Munition Contaminated Area
CRPD	Convention on the Rights of Persons with Disabilities
EO	Explosive Ordnance
EORE	Explosive Ordnance Risk Education
ECIS	Explosive Ordnance Contamination Impact Survey
FSL	Food Security and Livelihood
HA	Hazardous Area
HiHFAD	Hand in Hand for Aid and Development
HMA	Humanitarian Mine Action
IDP	Internally Displaced Person
IED	Improved Explosive Device
iMFAD	İnsani Mayın Faaliyeti Derneği (Humanitarian Mine Action Association)
IMAS	International Mine Action Standards
MUCA	Mixed UXO Contaminated Area
NTS	Non-Technical Survey
PIN	People in Need
PSS	Psychosocial Support
SCHF	Syrian Cross-border Humanitarian Fund
UN	United Nations
UNMAS	United Nations Mine Action Service
UXO	Unexploded Ordnance
VA	Victim Assistance
VDC	Victim Data Collection
WASH	Water, Sanitation and Hygiene

DEFINITIONS

In accordance with International Mine Action Standards (IMAS) 04.10, *Glossary of mine action terms, definitions and abbreviations*, the following terms have been used in this report with these definitions.

Clearance – in the context of mine action, the term refers to tasks or actions to ensure the removal and/or the destruction of all Explosive Ordnance from a specified area to a specified depth or other agreed parameters as stipulated by the NMAA/Tasking Authority.

Cluster munition – Cluster munition refers to a conventional munition that is designed to disperse or release explosive sub-munitions each weighing less than 20 kilograms, and includes those explosive submunitions. (CCM)

It does not include the following:

- a) a munition or submunition designed to dispense flares, smoke, pyrotechnics or chaff; or a munition designed exclusively for an air defence role;
- b) a munition or submunition designed to produce electrical or electronic effects;
- c) a munition that in order to avoid indiscriminate area effects and the risks posed by unexploded submunitions, has all of the following characteristics:
 - (i) each munition contains fewer than 10 explosive submunitions;
 - (ii) each explosive submunition weighs more than four kilograms;
 - (iii) each explosive submunition is designed to detect and engage a single target object;
 - (iv) each explosive submunition is equipped with an electronic self-destruction mechanism;
 - (v) each explosive submunition is equipped with an electronic self-deactivating feature.

CMCA – an area known, or suspected, to contain cluster munition remnants. (CCM)

Explosive Ordnance – Interpreted as encompassing mine action’s response to the following munitions:

- Mines
- Cluster Munitions
- Unexploded Ordnance
- Abandoned Ordnance
- Booby traps
- Other devices (as defined by CCW APII)
- Improvised Explosive Devices*

Note: Improvised Explosive Devices (IEDs) meeting the definition of mines, booby-traps or other devices fall under the scope of mine action, when their clearance is undertaken for humanitarian purposes and in areas where active hostilities have ceased.

EOD – the detection, identification, evaluation, render safe, recovery and disposal of explosive ordnance. EOD may be undertaken:

- a) as a routine part of mine clearance operations, upon discovery of explosive ordnance;
- b) to dispose of ERW discovered outside hazardous areas, (this may be a single item of ERW, or a larger number inside a specific area); or
- c) to dispose of explosive ordnance which has become hazardous by deterioration, damage or attempted destruction.

HA – a generic term for an area perceived to have mines and, or ERW.

Improvised Explosive Device (IED) – a device placed or fabricated in an improvised manner incorporating explosive material, destructive, lethal, noxious, incendiary, pyrotechnic materials or chemicals designed to destroy, disfigure, distract or harass. They may incorporate military stores, but are normally devised from non-military components.

Note: An IED may meet the definition of a mine, booby trap, and/or other type of explosive ordnance depending on its construction. These devices may also be referred to as improvised, artisanal, or locally manufactured mines, booby traps, or other types of explosive ordnance.

Impact – in the context of mine action, the term refers to the level of social and economic suffering experienced by the community resulting from the harm or risk of harm caused by explosive ordnance hazards and hazardous areas.

Note: Impact is a product of:

- a) the presence of explosive ordnance hazards in the community;
- b) intolerable risk associated with the use of infrastructure such as roads, markets etc;
- c) intolerable risk associated with livelihood activities such as use of agricultural land, water sources etc; and
- d) number of victims of mine and ERW incidents within the last two years.

Note: in the context of mine action evaluation, the term refers to the positive and negative, primary and secondary long-term effects produced by an intervention, directly or indirectly, intended or unintended. The term 'final outcome' may be substituted.

Mine action – activities which aim to reduce the social, economic and environmental impact of mines, and ERW including unexploded submunitions.

Note: Mine action is not just about demining; it is also about people and societies, and how they are affected by landmines and ERW contamination. The objective of mine action is to reduce the risk from landmines and ERW to a level where people can live safely; in which economic, social and health development can occur free from the constraints imposed by landmine and ERW contamination, and in which the victims' different needs can be addressed. Mine action comprises five complementary groups of activities:

- a) MRE;
- b) humanitarian demining, i.e. mine and ERW survey, mapping, marking and clearance;
- c) victim assistance, including rehabilitation and reintegration;
- d) stockpile destruction; and
- e) advocacy against the use of APM.

Note: A number of other enabling activities are required to support these five components of mine action, including: assessment and planning, the mobilisation and prioritisation of resources, information management, human skills development and management

Spot Tasks – clearance through EOD for the removal of single, or multiple items of explosive ordnance.

Submunition – any munition that, to perform its task, separates from a parent munition. mines or munitions that form part of a CBU, artillery shell or missile payload.

Survivor – a man, or a woman or a child who has suffered harm as a result of a mine, ERW or cluster munition accident.

Unexploded submunition – an explosive submunition that has been dispersed or released by, or otherwise separated from, a cluster munition and has failed to explode as intended.

UXO – explosive ordnance that has been primed, fuzed, armed or otherwise prepared for use or used. It may have been fired, dropped, launched or projected yet remains unexploded either through malfunction or design or for any other reason.

Victim – persons either individually or collectively who have suffered physical, emotional and psychological injury, economic loss or substantial impairment of their fundamental rights through acts or omissions related to the use of mines or the presence of ERW. Victims include directly impacted individuals, their families, and communities affected by landmines and ERW.

Note: in the context of victim assistance, the term may include dependants or other persons in the immediate environment of an explosive ordnance casualty, hence having a broader meaning than survivor.

Victim assistance – refers to all aid, relief, comfort and support provided to victims (including survivors) with the purpose of reducing the immediate and long-term medical and psychological implications of their trauma.

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