Explosive Weapons in Populated Areas (EWIPA), Contamination and Mine Action

Syria is marked by the intense use of Explosive Weapons in Populated Areas (EWIPA), and the level of contamination by explosive hazards, left after bombing and shelling, is alarming. Already in 2017, experts estimated that it would take at least 30 years to clear Syria from Explosive Remnants of War (ERW).[1]

Contamination causes injury, death and psychological trauma throughout Syria every day. In 2017 it was estimated that, until then, 150,000 persons had been injured by explosive accidents, 50,000 of which needed amputations.[2] Moreover, available data shows that the increasing use of aerial bombardment has made the conflict progressively more deadly for children. The proportion of child deaths increased almost threefold; from 1 in 10 of all civilian deaths in 2011 to 1 in 4 by 2016.[3]

Contamination with ERW, exacerbated by inadequate health and rehabilitation services and socio-economic deprivation from years of crisis, means that many areas in Syria are not safe and that dignified return cannot be guaranteed. The battle for Raqqa, for instance, displaced 270,000 people,[4] and Raqqa is now reported to be one of the most heavily contaminated places found on earth since the early 1990s.[5]

Humanitarian Mine action is a central component of the response. It incorporates mine clearance activities, risk education, victim assistance and advocacy. There is an immediate need to scale up both humanitarian mine clearance activities and risk education; research conducted among survivors of explosive hazards in 2018 showed that 95% had not received risk education prior to the accident.[6] Moreover, survivors of explosive accidents, as well as their families and communities, need specialised and disability inclusive health services, and livelihoods opportunities.

Further contamination, injury and death can only be prevented through the immediate cessation of hostilities and, barring that, respect for International Humanitarian Law.

Urgent Concerns

Explosive Weapons Contamination

- Widespread contamination with explosive remnants of war (ERW) is the result of intense use of explosive weapons in populated areas in Syria, including confirmed repeated use of landmines, cluster munitions and other banned weapons.[7]
- Improvised Explosive Devices (IEDs), including booby traps and improvised landmines are particularly unpredictable and difficult to detect, consequently increasing the threat they pose to the civilian population.
- Between January and October 2019 there were, on average, 184 explosive incidents per day.[8] In 2018 the average was 187. 26.1% of the incidents were related to airstrikes, 69.9% to the use of heavy weapons and 4% to IEDs and other explosives.[9]
- Between 2011 and 2018 there were 79,206 recorded casualties from explosive weapons, 87% of which were civilians. While all population groups are at risk, children, especially boys, agricultural workers and people on the move are particularly vulnerable to being injured or killed by a landmine or ERW.[10]
- The use of EWIPA also has a devastating effect on people's living environment, and their access to services.
  - Aleppo has the highest number of damaged or destroyed structures, followed by Eastern Ghouta, Homs and Raqqa, while Hama has both the highest number and density of destroyed structures.[11] All locations saw heavy aerial bombardment, leaving roads, housing, schools, health centres, and water and sanitation systems either destroyed or rendered non-functional;

8. UNMAS briefing to the UN Security Council, 24 October 2019
9. Sub Cluster Mine Action overview, January 2019
Testimony from someone who suffered as a result of mine contamination, and was supported by humanitarian organisations working in the field

“We saw that more and more people were going back to Raqqa so we decided it was time to go home too. At the time, I didn’t know how contaminated our neighbourhood was. But when we came back to our neighbourhood, we found our house completely destroyed, like thirty other ones.

There were no more walls or a roof so we set up a small camping site in our old courtyard, in which we could live for the time being. On that day, my kids were playing around the courtyard and all of a sudden, a mine exploded in the ground. Two of my sons, Ali (5 years old) and Omar (2 years old), died instantly. Rafif (3 years old) was severely injured.

We were brought in emergency to the Trauma Stabilization Point (TSP) in Raqqa and then to the hospital outside of the city. Doctors immediately operated, Rafif underwent five surgeries in the same week. Every day at the hospital, we see between 50 and 60 new people, injured by mines and IEDs, being brought to the hospital.

People want to go back home, because where do you want them to live? Usually, when they return, their house is completely destroyed so they just arrange one of the rooms as they can and sleep in it. But everything is booby-trapped. I know so many people to whom it happened. It’s the same story, over and over. The same thing happened to our neighbours.”

• at least 50% of Syria’s sewage systems were rendered non-functional by hostilities, exposing Syrian people in those areas to significant health risks;[12]
  • lost access to productive land for livelihoods and settlement reinforces poverty, further destabilises communities and undermines opportunities for recovery.

Minimum Prerequisites for Safe and Dignified Return

The exact scale and scope of explosive hazard contamination of most localities and areas is unknown due to a lack of access and a lack of local capacity in humanitarian mine action, but there is ample evidence of the gravity of the situation: available data suggests that 11.5 million people in Syria are at risk of exposure to explosive hazards,[13] up from 10.2 in 2018, and 1 in 4 communities report some form of contamination.

Humanitarian actors, including those providing mine action services, cannot ensure that the conditions for safe and dignified return are met if they have limited access to the localities concerned.

A technical explosive hazards survey is required to further assess and understand the threats, determine clearance priorities and inform the population and humanitarian actors in affected areas. Marking and removal of explosive hazards is required on the roads and in areas of potential return and humanitarian intervention. This work requires time due to the improvised, diverse and widespread nature of the contamination.

The Impact of Blast Injuries

There are four basic mechanisms through which an explosive weapon can cause harm to the human body:

Primary Blast Injury: the result of a shock wave that led to fragmenting and shearing of tissue in air-filled organs, like ears, lungs, stomach and intestines, and organs that are surrounded by fluid, like the brain.

Secondary Blast Injury: caused by flying fragments or debris.

Tertiary Blast Injury: caused by the supersonic wind which can pick up and throw anyone close enough to the explosion to feel its effects.

Quaternary Blast injury: injuries indirectly caused by the explosion, such as burns, crush injuries and choking caused by asphyxiating dust.[14]

Not captured in this classification, however, is the psychological impact for survivors, the families of those killed or injured, and affected communities:

According to the 2018 Syria Arab Republic Humanitarian Response Plan (HRP), one in five Syrians is at risk of developing moderate mental health issues, and one in 30 is at risk of developing severe or acute mental health problems. In 2019, the HRP estimated that just under 1 in 7 Syrians is in need of mental health consultations.

An HI study conducted in 2016 among Syrians in Jordan found that 80% of people injured by explosive weapons expressed signs of high psychological distress. 66% of them were unable to carry out essential daily activities because of their feelings of fear, anger, fatigue, disinterest and hopelessness. 65% were so upset that they tried to avoid places, people, conversations or activities that reminded them of the traumatic event; 75% of children under 5 assessed felt so afraid that nothing could calm them down.[15]

[13] UNMAS briefing to the UN Security Council, 24 October 2019
Recommendations

To parties to the conflict:
- Stop the use of explosive weapons with wide area effects in populated areas;
- Encourage local authorities to create an enabling environment for organisations that conduct mine clearance activities, risk education sessions and victim assistance programs, including by ensuring rapid registration.

To donors and UN agencies:
- Recognize that humanitarian mine action is a prerequisite to any immediate or long-term recovery;
- Commit humanitarian funding to significantly scale up mine action activities, i.e. risk education, victim assistance, technical and non-technical surveys, clearance of mines and explosive remnants of war and advocacy;
- Include resources in calls for proposals that focus on the effects of the use of explosive weapons and better data collection, monitoring and reporting measures on affected populations, in a gender, age and disability inclusive manner;
- Encourage the use of a comprehensive mine action approach that includes:
  - risk education about the dangers of explosive weapons and risk mitigation measures;
  - victim assistance that offers multi-disciplinary health services, i.e. physical & functional rehabilitation, prosthesis and orthotics (P&O) services, provision of assistive devices, psychosocial support (PSS), and socio-economic support through emergency distributions and livelihood activities;
  - clearance.
- Require that recipients of mine action funding (including any sub-grantees/sub-contractors) conduct their activities in line with the International Mine Action Standards and humanitarian principles.

To UN Security Council:

To UN Member States:
- Actively participate in the process towards a political declaration to address the harm caused by explosive weapons in populated areas that was launched in Vienna on the 1st of October 2019, and that aims to commit States to developing operational policies and procedures to stop the use of explosive weapons with wide area effects in populated areas and to provide assistance to victims and affected communities and recognize their rights.