CONTACT

Action on Armed Violence

5th Floor, Epworth House 25 City Road London EC1Y 1AA **T** +44 (0)20 7256 9500

F +44 (0)20 7256 9311 E info@aoav.org.uk

www.aoav.org.uk



Report by

Robert Perkins

Research by

Research carried out in Lebanon by Robert Perkins, with Janine di Giovanni, Nicole Tung and Suzan Haidamous.

Editor

Iain Overton

With thanks to

Nerina Čevra, Henry Dodd, Saara Jaffery-Roberts, Serena Olgiati, Steve Smith and all in Lebanon who cooperated with this research.

Copyright © Action on Armed Violence (December 2013)

Photography

All photos: Nicole Tung/AOAV

Cover illustration

Mohammed Adjeye, 11, lays wounded in a clinic in Aarsal, Lebanon, 20 November 2013. Mohammed was injured by an explosive weapon near his home several days earlier.

Infographics

Sarah Leo

Clarifications or corrections from interested parties are welcome.

Research and publications funded by the Government of Norway, Ministry of Foreign Affairs.

Design and printing

Tutaev Design

CONTENTS

Foreword	1
Overview	2
Infographic: the cost of explosive violence	3
Syria's explosive violence	Ę
Health	7
Displacement	17
Conclusion	27
Recommendations	28
Notes	29

FOREWORD

STEVEN SMITH, MBE Chief Executive, Action on Armed Violence

The world has watched Syria be blown apart by explosive violence.

Explosive weapons like rockets, mortars and airdropped bombs have been a major driver of suffering in the country since fighting began in March 2011.

Action on Armed Violence (AOAV) has been documenting the pattern of harm caused by the use of explosive weapons in populated areas around the world. Our monitoring of the reporting of explosive violence incidents has shown that in Syria nine in ten of the people killed and injured by these weapons have been civilians.1

In Lebanon, host of the largest number of Syrian refugees, AOAV met with some of the victims of these weapons. People who had been struck by mortars as they braved a trip to a market. People who had been bombed in their own homes.

None of the incidents in which these injuries were sustained would have made the global news. With people dying daily at the hands of explosive

weapons, smaller attacks barely warrant a mention.

But behind each number, each explosion, is a family who have lost a loved one, an injury that will require years of painful recovery, a lifetime's worth of possessions demolished.

Lost in the endless news-cycle of deaths are the people who survived - and this report is designed to highlight their plight and to show that explosive weapons have a particular capacity to cause longterm suffering that all too often goes unreported.

How do the lives of the civilians caught up in an incident of explosive violence change? How are victims of explosive violence able to manage their injuries? What role have explosive weapons played in driving displacement?

That is what this case study seeks to investigate. Focusing on the people most effected by Syria's catastrophic violence to see how they have been effected months or years on and assessing what support, if any, they have received.





The family of Abu Nidal, right, gather on the balcony of their home during an interview in the Shatila Palestinian camp in Beirut, Lebanon, on 17 November 2013. (Nicole Tung/AOAV)

OVERVIEW

Every refugee AOAV spoke with in Lebanon fled the chaos and destruction caused by the use of explosive weapons in Syria. Every refugee witnessed someone be killed or injured by an explosive weapon.

The shelling of markets, the bombing of villages, the destruction of mosques and apartment blocks; each story was characterised by a pattern of violence in which weapons with a devastating wide-area impact were used in a location that exposed civilians to great risk. Action on Armed Violence (AOAV) has long called attention to this pattern, which every year causes thousands of civilian casualties not only in Syria but worldwide.2

The testimonies of Syrian refugees in Lebanon show that beyond the immediate deaths and injuries from bombs and shelling, the insidious impact of these weapons continues to shape the lives of survivors and victims for years after the event.

HEALTH

The victims of explosive weapons suffer life-changing and often unreported injuries which require costly, lengthy treatment. Even within a very small sample size the experiences of Syrian refugees in Lebanon who have been injured by explosive weapons embody several notable patterns.

- ▶ People injured by explosive weapons experienced traumatic amputations, severely-broken bones, damage to vision and hearing, serious burns and damage to internal organs such as the liver and brain. The types of injuries most commonly encountered by AOAV in Lebanon were fragmentation wounds to the limbs and back.
- Every civilian injured by a bomb or a shell that AOAV spoke with still needed treatment. While some refugees were wounded in recent explosions, other injuries dated back as far as two years and yet these casualties still require considerable medical support. Explosive weapons therefore fuel a public health crisis, as medical facilities struggle to meet demand.
- ▶ None of the refugees AOAV spoke with are receiving psychological counselling or emotional support. At least a third of those interviewed reported needing physiotherapy but were not getting it. Five people needed further surgery.

- ► Half of the people AOAV spoke with lost their homes to bombing and shelling in Syria.
- ► 64% injured refugees suffered injuries to limbs that required physiotherapy or prosthetics.
- ► A third of injured refugees were not receiving
- A quarter had been displaced more than once
- Over three-quarters were not in work.
- A third of those injured polled are not receiving any form of medical treatment. In Lebanon an expensive and overloaded medical system is seen by many refugees as the primary barrier to access.
- Most of the injured had been wounded by groundlaunched explosive weapons, such as Grad rockets or tank shells. These weapons affect a wide-area, and it is no surprise that in the vast majority of these incidents there were multiple casualties, including, in three cases, other members of the victim's own
- All respondents described the attack in which they were injured as having taken place in a populated area. Several were injured as they left shelter during shelling to get food and supplies from markets.3

DISPLACEMENT

While threats like sniper fire or detention were cited as causing great concern, the fear of explosive weapons, both for their unpredictability and the power of their effects, were present in the testimonies of every refugee AOAV spoke with in Lebanon.

- Half of the people AOAV spoke with had lost their homes as a result of bombing and shelling in the area. Explosive weapons with a wide-area effect have a particular capacity to cause damage to buildings and physical infrastructure, and this pattern has been replicated across the country.4
- Explosive weapons contribute in robbing people of their livelihoods. Over three-quarters of the people AOAV spoke with were unable to work in Lebanon, despite having the legal right to do so. Through the loss of a primary earner, or the reduced physical ability to work, the impact of a shell or mortar erodes the ability of affected families to provide sustainable income. It also, in the short-term, places further strain on an overloaded aid system.

SYRIA'S SHOCKWAVES

THE COST OF EXPLOSIVE VIOLENCE FOR SYRIA'S REFUGEES

THE PERSONAL COST

RECOUNTING THE EXPERIENCES OF SYRIAN REFUGEES AOAV MET WITH IN LEBANON



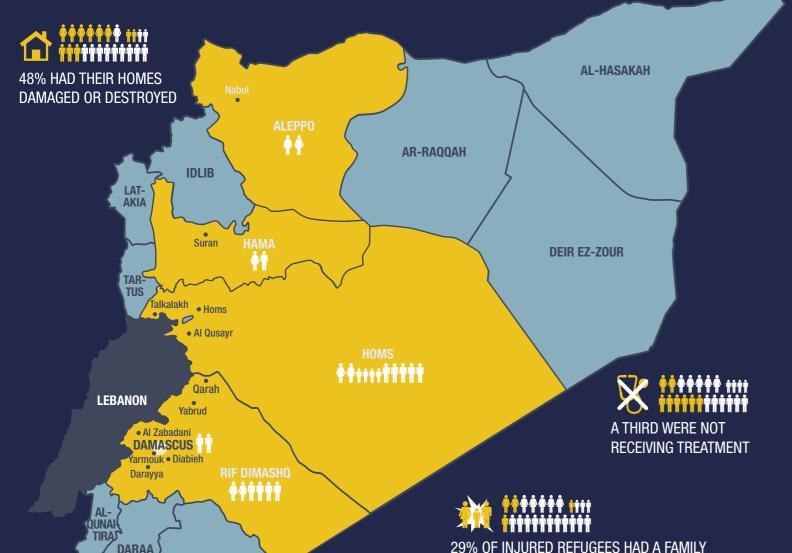
35% OF CIVILIAN REFUGEES HAD A FAMILY MEMBER KILLED OR **INJURED BY EXPLOSIVE WEAPONS**



86% OF INJURED REFUGEES WERE HURT BY GROUND-LAUNCHED **EXPLOSIVE WEAPONS**



ALL REFUGEES HAD SEEN SOMEONE KILLED OR INJURED BY EXPLOSIVE WEAPONS





WERE NOT IN WORK

DARAA

AS-SUWAYDA



NONE RECEIVED PSYCHOLOGICAL COUNSELLING OR EMOTIONAL SUPPORT



MEMBER WHO WAS ALSO INJURED OR KILLED

ALL INJURED REFUGEES STILL REQUIRED TREATMENT FOR THEIR WOUNDS

THE NATIONAL COST

REBUILDING SYRIA FROM THE RUBBLE

▗▄▗▗▗▗▗▗▗▗

1.2 MILLION HOUSES IN **SYRIA HAVE BEEN DAMAGED OR DESTROYED**





DAMAGED SCHOOLS



57 DAMAGED HOSPITALS



400,000 300,000 **COMPLETELY** PARTIALLY **DESTROYED DESTROYED**

500,000 DAMAGED **INFRASTRUCTURE**

COST TO REBUILD SYRIA: \$80 BILLION

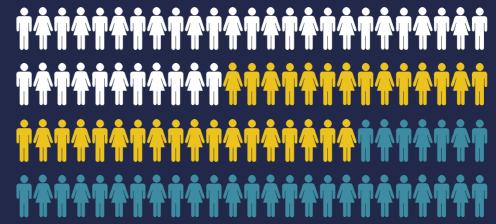




UN APPEAL FOR HUMANITARIAN AID TO SYRIA: \$6.5BN

THE HUMAN COST

RECORDING THE IMPACT OF EXPLOSIVE WEAPONS ON CIVILIAN LIVES



TOTAL DEATHS: 92,148

OF WHICH CIVILIANS: 59,334

CIVILIANS KILLED BY EXPLOSIVE WEAPONS: 29,246

SYRIA'S EXPLOSIVE VIOLENCE

Explosive weapons like air-dropped bombs, mortars and rockets have killed and injured thousands of people in Syria.

Syrian casualty-recording group the Violations Documentation Center (VDC) has recorded nearly 100,000 deaths since the war began; of whom 59,334 were civilians. Half of all the civilian deaths in the conflict are estimated to have been caused by explosive weapons (49.3%).5

Explosive weapons are area-effect weapons. They all bring death and destruction by projecting blast and fragmentation around a point of detonation.

When these weapons are used in populated areas, it is civilians who are overwhelmingly the victims. For more than two years in Syria barely a day has gone by without artillery shells destroying a residential street, a bomb dropping unguided into a village, or an improvised explosive device detonating without warning in a town square.

This case study was conducted through field research in Lebanon during November 2013.

Lebanon is host to the largest number of Syrian refugees. More than a quarter of Lebanon's population is now a refugee, with over 800,000 people registered with the United Nations High Commissioner for Refugees (UNHCR) at the time of AOAV's visit.6

The vast majority of refugees in Lebanon are from the provinces of Homs, Aleppo and Rif Dimashq.7 These are three of the provinces with the highest number of civilian casualties from explosive violence.

METHODOLOGY

The interviews that inform this case study were conducted in locations across Lebanon, including Beirut, Tripoli and along the border with Syria.



Locations visited by AOAV in Lebanon.

Survivor testimonies were identified through local NGOs and community organisers. AOAV conducted a total of 23 semi-structured interviews with Syrian refugees and their families. This includes people who suffered direct physical injuries, and people who experienced other indirect effects from explosive weapons. Of the 16 people AOAV spoke with who were injured, two were armed actors and so were not included in the analysis. In addition AOAV conducted interviews with seven doctors. both Syrian and Lebanese, at medical facilities across the country.

In all cases informed oral consent was provided. Many refugees asked not to have their faces or real names in this report. In the interests of confidentiality and safety the names of many interviewees have been changed.

This case study is intended as a snapshot of the diverse impacts of explosive weapons on civilians. Although analysis has been conducted of the responses gathered in field-research, with such a small sample size these conclusions are merely indicative of the greater patterns of harm.

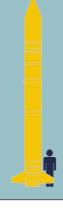
WIDE-AREA WEAPONS

Many of the explosive weapons in Syria have the capacity to affect a very wide area. These are weapons with a large explosive content; weapons which are either inherently inaccurate or used inaccurately; or which fire multiple munitions into an area.

AOAV has previously investigated some of the worst weapons in use in Syria.8 AOAV has recorded large

numbers of civilian casualties from explosive weapons like missiles, mortars and air-dropped bombs.

The three weapon types below are just a few examples of the many powerful and deadly munitions that conflict parties in Syria are using across populated areas and whose wide-area impact are shattering lives like those reported here.



MISSILES

The Frog-7 is a hugely-destructive ballistic missile which, much like the notorious 'Scuds,' travels a vast range and has a massive blast effect. It is over 2,500kg in weight, and almost ten metres long. A single such missile can obliterate an entire neighbourhood. In the first two years of fighting, AOAV recorded an average of 51 casualties per incident of reported missile fire in Syria.9



MORTARS

Weighing 130kg, the M-240 is the world's biggest mortar bomb. Mortars are indirect-fire weapons which can fire without the user being able to see their target. The bombs fall almost vertically and scatter their fragments across a wide 360-degree-circle. The use of the M-240 in Homs in February 2012 caused outcry that such a large and imprecise weapon could be used in such a densely-populated area.¹⁰



AIR-DROPPED BOMBS

The OFAB 100-120 bombs are the classic 'dumb' bombs. Dropped from heights of up to 15km, these bombs fall at speeds of over 1,150 km/hour and are being dropped over towns and cities in Syria with little possible control over the outcome. 96% of all air-dropped bomb inidents recorded by AOAV in Syria have taken place in populated areas.¹¹

HEALTH Patients in the hallway of a clinic in northern Lebanon, on 19 November 2013. The clinic deals with non-emergency cases coming from Syria and helps arrange prosthetics and rehabilitation for amputees. They also provide after surgery care and physical therapy. Some patients stay for up to a year while they recover. (Nicole Tung/AOAV)

MANAGING INJURIES

"Most of the injured, even after they are treated, 99% of them, maybe only one person is back to his normal shape. Everyone else has some kind of handicap."

Dr Latakia, near Tripoli. 12

Explosive weapons leave deep and life-long scars, both physical and psychological. They cause a common pattern of injuries that are complex to treat and require long-term management.

In the first two years of fighting in Syria, 47.6% of civilian casualties from explosive weapons recorded by AOAV were deaths.

1 March 2011-31 March 2013

AOAV's monitoring of explosive violence incidents around the world suggests that as a global pattern, a third of the casualties from explosive weapons are killed.¹³ In Syria the ratio of deaths to injuries is much closer, arguably reflecting the more destructive and powerful weapons that are being used among civilians. However, civilians are still more likely to be injured than killed by explosive weapons.

AOAV met with civilian refugees who were injured by explosive weapons in private medical facilities run by charities, and in refugee camps. Even within a very small sample, the nature of the injuries encountered in Lebanon reflects several notable patterns. The types of injuries most commonly encountered and reported were to the limbs and back, caused by the fragmentation effects of explosive weapons. More serious and life-threatening injuries commonly associated with explosive weapons either necessitate emergency treatment in Syria itself or are referred to specialist units. 15

Crucially, while the injuries encountered in Lebanon are not deemed life-threatening now by the medics that treat them, they are life-changing. These injuries from explosive weapons, including amputation, neurological damage, paralysis, burns, and broken bones, will all require long-term management and rehabilitation.

STIGMATISATION

There are concerns of growing inter-communal tensions between Syrians and their Lebanese hosts. ¹⁶ An assessment conducted in September 2013 suggested that refugees self-impose restrictions on their own freedom of movement, driven in part by fears of verbal and physical harassment. ¹⁷

Salam Al-Ahmad now walks with crutches because his right leg has not healed eighteen months after a bomb shattered his tibia in Homs.

"Just being injured, you are threatened, people suspect you", he said. "You are a Syrian and you are injured. They may arrest me [...] It is like we were injured by Bashar al-Assad and they [the Lebanese] told him 'Don't worry, we'll continue the injury here." While this was not a common fear, refugee victims whose physical injuries from explosive weapons are visible are particularly intimidated by the real or perceived stigma they face.

I worked in construction. Now?
I will not be working like other people. I will be alone.

I cannot be normal like other people.
I will probably never be able to work.
How can I build a family, if I cannot work? How can I ever get married, have children, if I cannot support them?

I feel desperate. It's been a year and two months [since I was injured in an explosion], and the bones are not sticking together.

My leg is already 3cm shorter. The bones are not connecting to each other. If at my age the bones will not heal, what will happen later?

Salam, 23

MULHAM



Mulham Azoubi, 17, in his new home on 19 November 2013. (Nicole Tung/AOAV)

All I want is to go back to school. I want a time when people don't look at me with pity. They do that now. Mulham

Mulham is 17-years-old. His father Ibrahim told AOAV that Mulham had been top of his class that year at his school in Homs.

That was before the tank shell.

On 28 November 2011, early in the Syrian fighting, Mulham's hopes of becoming a pharmacist were nearly destroyed when the family home came under attack.

There had been no warning, no other shelling that day. The attack came as a complete surprise. The family had in fact moved once already to escape the encroaching bombing and clashes in the city of Homs itself, and were living in a nearby town where they thought they had found safety.

Two shells struck the three-storey building. The first hit the water and fuel tanks on the roof top. As the family rushed upstairs to see what had happened,

the second shell struck the top floor, destroying it and blowing Mulham off his feet.

The impact blasted a chunk of bone from his skull, leaving him battling for his life.

"Pieces went up into the side of his head. It would have hit him in the face, but he turned as his sister called out his name", said his father. "He still has eight pieces in his head, and four in his body. One had to be removed from his throat."

Mulham was in a coma for six weeks. He was taken to a public hospital in Homs, where he underwent several operations to repair his skull, as well as numerous blood transfusions. His parents were warned to expect the worst.

"When we were taken into the hospital we were told 'Don't expect him to live", Mulham's mother told

AOAV. "Every morning they had to go out and find someone who could donate blood and pay for it to be transplanted. I look ten years older than my real age because of this experience."

Mulham himself remembers nothing of the attack or of the aftermath. "When I woke up, I didn't remember anything for ten days. I thought I was still in Talkalakh [the town where the family had moved months before]. When I first woke up I could not walk. I needed treatment for a long time before I could move my arm."

His father continued; "When he was injured in hospital, ladies cried when they saw him. And then Mulham would cry, because he didn't know what was going on, what was wrong, and why they were so sad. We never imagined that this could happen to us."

The fragments of the shell are still in Mulham's brain, impossible to remove for fear of further damage.

There are no bones in the right side of his head, and the hair has not grown back to cover the scars. The attack took place almost two years to the day that AOAV met Mulham and his parents. His recovery is in many ways miraculous.

But Mulham is still battling to recover his speech, his memory, the movement of his arms and legs, and his independence.

Mulham has needed physiotherapy every day for a year. He is now able to walk, with the support of his father, and could reach his arm out to shake hands. But even now, two years after he was struck by the shell, he is unable to grip a pen. "I watch TV now. That's all I can do", he says with a frustrated shrug. "I want to write. All I want is to go back to school. I want a time when people don't look at me with pity. They do that now."

Mulham was told that with regular physiotherapy and exercise he can regain more movement in his arms. But for the past two months there has been no more treatment; the centre has moved to the other side of Lebanon, to more pressing cases.



Mulham sits with his father Ibrahim as he inspects Mulham's X-rays, 19 November 2013 (Nicole Tung/AOAV)

VICTIM ASSISTANCE

AOAV recorded an average of 24 civilian casualties per incident of explosive violence in populated areas in Syria, compared to 5 in other areas.

1 March 2011 - 31 March 2013

The nature of injuries caused by explosive weapons means that the medical needs of victims are many and complex. Initial services needed by victims and survivors of explosive weapons range from physical rehabilitation and prosthetics to counselling for trauma.

The scale of needs in Lebanon is overwhelming the available services. UNHCR, which coordinates the humanitarian response for refugees, assesses needs as new arrivals are registered. With many refugees thought to be unregistered with UNHCR, and efforts to establish a centralised database of patient cases incomplete, it is unclear to what extent there is a full appreciation of how many refugees in Lebanon have disabilities from explosive weapons, or the extent of their injuries.18

The UN system is struggling to respond to the scale of needs in Lebanon. UNHCR has received only 38 percent of the funding requested, having launched an appeal for \$1.7 billion at the start of 2013.19 With an average of 3,000 new arrivals in Lebanon a day, UNHCR has adopted a policy of targeting resources at highest priorities.20 While UNHCR works to meet the primary healthcare needs of refugees in particular, the policy of focusing only on the most vulnerable means that many other refugees, particularly those requiring long-term assistance, do not receive the support that they still need.

"In health we've managed to cover 75 percent of the medical bills. It is a huge achievement because we've been able to do so much for so many, but for the 25 percent of the services that the refugees have to bear, it [the cost] is huge for some treatments. For a country

like Lebanon which has a highly-privatised healthcare system, it really means that families go through hell sometimes when they have a serious case." Roberta Russo, Communications Officer, UNHCR

Crucially, health care in Lebanon is highly privatised and is therefore very expensive. Refugees in Lebanon who had been injured by explosive weapons cited the cost of treatment as a significant barrier to access.21

Lebanon is not a signatory to the 1951 Convention relating to the Status of Refugees.²² Despite this, the Government of Lebanon has maintained an openborder policy and has provided access to key public services for Syrian refugees. However, the growing numbers of refugees in Lebanon and the length of time they have now been in the country has created a level of demand that cannot be matched by public authorities.

The Syrian government is obviously not meeting its own obligations towards victims, but there are effective healthcare services being run in Lebanon for Syrians, by Syrians. Charities are trying to fill the gaps in needs assessment left by public authorities.

COST OF TREATMENT



About 18 months ago I was injured by a mortar. I was selling vegetables in Yarmouk [Damascus]. I now have only 50% function in my arm. I can't pay for the physiotherapy that I need. I went to see a doctor who told me that the cost was \$1,500, but because I was poor he would charge me

Before the war we had good medical care, we had all our rights and we were living very well. Here I don't have the money to buy a sandwich. I sleep on a vegetable cart in the street. We don't want anyone's charity, we just want to work.

Mahmoud*, 35 (*real name withheld)

OSAMA



Osama, 29, sitting in his bed in a shopping centre in northern Lebanon, 19 November 2013. (Nicole Tung/AOAV)

Osama lives in a shopping centre that has been repurposed by UNHCR to house Syrian refugees.

The centre was built nearly two years ago, but never opened as intended. Instead it has become a home to an estimated 120 families. The building lacks most basic amenities and services, including toilets and adequate plumbing.

Osama and his family live in one of the empty shops, protected by a metal shutter. Blankets are layered across the doorway to keep in what little heat and privacy is available.

A hard, thin mattress has been his home for a year and a half ever since he was blown up in downtown Homs on his way to the market. "It was in March 2012. I went out of the house to buy things when the shelling started. I went to buy vegetables," he told AOAV. "I wanted some parsley from the market, and it was on my way back that I was hit."

A mortar bomb fell in one of the alleys where Osama was walking, injuring him and three others.

Jagged pieces of the bomb itself are embedded in his back and left leg. The shrapnel in Osama's back has prevented him from standing or walking since he was injured. He claims that his left leg is now three inches shorter than the right.

"I have many pieces of shrapnel in my body, in many places. The main piece is the most dangerous one. It's the most critical one because it means I can't walk. It is in the spinal cord, in T9."

"At first I was not able to sit. My brother's wife had to help me. I am improving because at least I can sit now. But the mattress is very harmful for me. I have new wounds from the mattress. I really need a water

None of Osama's medical needs are being met in Lebanon. He says he was assessed in the past by NGOs and UN agencies who have not done anything for him yet.

Osama is resilient, but he is frustrated and weary. The hospitals he has visited in both Syria and Lebanon

do not have the capacity to operate on his injuries, and he has not received any of the support that he needs. This support is not just limited to the urgent medical treatment of his injuries. The explosive weapon that knocked him down that day robbed him of his freedom of movement. Without even a wheelchair to get by, Osama is trapped.

"I need medication to sterilise the wounds. I have two wounds because I'm sitting all the time, I can't stand. I don't have a wheelchair.

At night I have a lot of pain. I don't have any painkillers, so when I'm in this kind of pain I cannot sleep. I've been like this for over a year, with promises that

someone can help. I just wish someone could come over here and help me.

I don't know if with physiotherapy I can walk, or whether I need an operation, but I just want to be able to work. When you see someone walking and you can't, it makes you sad. But you also have to depend on God, because this is your destiny."

Eight of the 14 injured refugees that AOAV met were not receiving any treatment at all.



Children help clean outside their family's shelter in the Waha Mall in northern Lebanon, 19 November 2013. (Nicole Tung/AOAV)

HEALTHCARE IN CRISIS

The widespread use of explosive weapons in Syria is playing a key role in driving a major public health crisis not only in Syria itself but also in neighbouring countries, like Lebanon where medical facilities are struggling to meet demand.

Directly, explosive weapons cause the physical destruction of Syria's health infrastructure and the maiming of thousands whose complex injuries place a strain on the healthcare system. As of October 2013 at least 57 hospitals in Syria were damaged, such as the Dar al-Shifa hospital in Aleppo, which was hit by S-5 rockets on 12 August 2012.²³

In the first two years of fighting in Syria AOAV recorded seven attacks involving explosive weapons on hospitals, killing and injuring 176 civilians.

1 March 2011 - 31 March 2013

Indirectly, explosive weapons are a key driver of the civilian displacement from Syria that includes vulnerable people already suffering from chronic illness like bronchitis, diabetes, and kidney failure. In December 2012, Syrian refugees made up 40% of all primary health care visits in Lebanon.24

MASS CASUALTY EVENTS

Explosive weapons commonly cause multiple casualties from a single blast, especially when they are used in populated areas where civilian numbers are concentrated. Of the people that AOAV spoke with in Lebanon who had been injured in an explosive weapon blast, it was most common for there to be between two and five other people injured or killed in the same incident.

This has reprecussions for the provision of medical aid. One doctor in a small private hospital described how his facility, which is staffed by just six nurses and a resident doctor, has had to treat more than 2,000 cases in five months. "I work for 18-20 hours a day.

The number of cases we see a day changes depending on the intensity of the fighting. The worst was the Qusair battle [May-June 2013], there were 700 injured people who came when we opened. We were seeing 30-50 new cases a day." Most of the injuries he saw had been caused by explosive weapons; "Mortars are the most dangerous, as are rocket launchers [...] Most cases are leg and arm injuries." 25

TREATMENT OF INJURIES

The injuries caused by explosive weapons are invariably extremely complex, often occurring in multiple areas across the body.26 These injuries necessitate lengthy treatment. One of the main risks to victims of explosive weapons is the threat of infection. Salam, who had suffered severe leg injuries from a bomb that hit him in Jobar district of Homs in August 2012, described how the infection got into his wounds and affected him. "For over a year I've only been able to sleep one or two hours a night because of the pain in my leg [...] For six months I had the same stitches. The treatment was so bad that there was no improvement until I came here [to northern Lebanon] after six months."

His doctors explained that most of the injuries they treat from bombs and rockets are infected, and that the infections often result from the nature of the original treatment they received in Syria, either first aid provided at the scene, or in field hospitals.27 As in the case of Salam, most of the refugees AOAV spoke with had undergone multiple operations, receiving treatment both in Syria and in Lebanon.

LIMITED RESOURCES

Medical staff at all four of the private facilities visited by AOAV in Lebanon reported a lack of key supplies, equipment, and medication.28 The charity sector provides vital medical services in Lebanon, particularly to refugees who cannot always afford payments in Lebanon's highly-privatised healthcare system. The inability of healthcare providers to afford full assistance is particularly pertinent and pronounced in two key areas relating to the needs of victims of explosive weapons.

The first is prosthetics, which are costly to provide and require extensive physiotherapy. Explosive weapons can cause loss or irreparable damage to limbs that necessitate amputation. Nine of the 14 wounded civilians interviewed by AOAV had suffered injuries to limbs which required physiotherapy or prosthetics.

Ibrahim lost his right leg above the knee after an artillery shell exploded outside his home in Souran, Hama governorate. He has been in hospital in Lebanon for a month, and has to wait another month before he receives an artificial leg.²⁹ Ibrahim is only 20-years-old. The provision of prosthetics is especially costly and complicated when applied to children and young people, because as they grow the limbs need to be regularly replaced.30

"This morning I operated on a little girl. She was hit with a mortar two weeks ago in Yabroud [in Rif Dimashq] and she had to have her hand amputated. She has already had one operation in Yabroud. She will need an artificial hand, but we can't do that for her here. It will be very difficult for her, she has to grow up without her hand." Dr Homs*, north Lebanon, 21 November 2013.

I've seen thousands of cases here and in Homs that cannot be described. Throughout the history of human beings there were never cases so horrible and so devastating as the cases we have seen. It is only people's faith that helps us go on.

* Both doctors have been detained and tortured in Syria. Their names have been withheld for their protection, and replaced by their home cities.

Dr Homs*



On a personal basis we try and help, but we aren't qualified.

Psychotherapy is not just for the wounded. It is needed by everybody, even us doctors. It is important that we too get separate help.

We're seeing people on a daily basis, always with their suffering that they tell us about, the suffering we see, and our own problems. It's a very difficult situation for us.

None of the private facilities in Lebanon visited by AOAV had the capacity to provide prosthetics themselves; only to provide after-care and limited physiotherapy. They also depend on charities and international NGOs to provide wheelchairs and mobility tools such as crutches. One doctor at a medical facility which treats many victims of explosive weapons said he relied on mobile physiotherapists to make daily visits. "I wanted a dedicated clinic here, but I can't afford the costs. It would cost \$15-20,000 for equipment alone."31

Dr Latakia*

The second is the provision of mental healthcare. None of the medical facilities visited by AOAV were able to provide counselling to victims and none of the injured AOAV spoke with had received such support. The provision of psychosocial assistance is vital, particularly for children.32 However as one doctor noted, this treatment requires especially long-term commitment. "Because it is so long-term, it is very expensive. It needs follow-up and that's something we can't provide."33

DR QASIM



Lasik, 17, who was wounded whilst trying to escape the fighting, in a hospital bed in Aarsal, Lebanon, 20 November 2013. (Nicole Tung/AOAV)

Dr Qasim heads the only hospital in Aarsal, on the Syrian border.

At the time of AOAV's visit, the fighting in Syria was raging just across the border from Aarsal, as government forces mount a major offensive to claim a string of strategic towns including Qarah, Qalamon, and Yabroud. The refugee crisis in Aarsal was particularly pronounced, with as many as 10,000 new arrivals reaching the town overnight on the 15-16 November.34

Dr Qasim is from Qusair, where he and his team operated on people during the heavy explosive violence earlier in 2013 that reduced the city to rubble.35

He has treated many civilian victims of explosive weapons, including children. "Most of the rocket injuries are women and children because they are still at home, and the rocket and the tank and the plane hit the houses. The most injuries to civilian people, to children, come from this."

His team has since fled across the border, where he continues to treat Syrians wounded by gunfire and explosive weapons, as well as people who

come with chronic illnesses.

"[Before the war] I was in internal medicine, I was a gastroenterologist", he said. "But now I treat the wounded. As a doctor, when we graduate, we make an oath to help all people and to follow-up, and this is what I've been doing.

During the recent tough times, I couldn't give space to my feelings, because if I did then it will hinder me from doing my job. So I put my feelings to one side and just do my job.

The thing that makes me most upset is when we have to do a surgery for someone and we don't have the surgery room available, or we don't have the right equipment. This hurts me the most.

We have some people who support us, but now people have reached a point of just counting how many Syrians have died each day, but don't have the compassion for what's going on [with the living]. We need all things. We need drugs for the children [...] we have patients here with diabetes, children who need insulin every day, and we can't give them it."

DISPLACEMENT A Syrian girl plays near the entrance to an informal refugee camp in Aarsal, Lebanon, on 20 November 2013. Aarsal, directly across the border from Syria, had received thousands of Syrian refugees as fighting displaced many civilians and wounded. (Nicole Tung/AOAV)

CHASED FROM THEIR HOMES

The use of explosive weapons with wide-area effects in Syrian towns and cities has forced millions of people from their homes.

While the wholesale dislocation of civilians from Syria is not solely due to explosive weapons, there is a clear link between the use of these particularly destructive and powerful munitions in populated areas and the resulting displacement.³⁶

The actual or threatened use of explosive weapons in populated areas has spread terror among civilians. This pattern of violence is cited frequently as a trigger for displacement.³⁷

One indicator of the role that explosive weapons play in forcing displacement is their impact on housing. In September it was estimated that 1.5 million homes have been partially or completed destroyed.³⁸

Half of the refugees interviewed by AOAV had lost their homes as a result of explosive violence.

Many families have not only been driven from their homes, but now have no home to which they can return. Amira lived in a village outside Aleppo with her husband's parents. After she left the country her home was destroyed in an airstrike. Her in-laws, who were unable to leave Syria, survived the attack but now live in a camp inside Syria.³⁹ The UN has estimated that by the end of 2013 2.5 million people will be internally displaced within Syria.⁴⁰

Bombs, shells and rockets are area-effect weapons. When used in populated areas they have the capacity to cause damage and destruction to physical infrastructure in a way that is not shared by other conventional weaponry.

MULTIPLE DISPLACEMENTS

The UN Commission of Inquiry on Syria has reported the use of explosive weapons to bring about the systematic displacement of civilians.⁴¹

Omar was driven out of his home in Rif Dimashq in February 2013 and now lives in an informal camp on the Syrian border.⁴²

"The kinds of rockets they were using were just unbelievable", he told AOAV. "The rocket launchers were more dangerous than anything because they don't target. They just hit randomly."

"The bombing was against civilians. It was not against the FSA, they were out in the fields. The bombing was in the town. Bombing was a process of displacement, to pressure the civilians, to push us out. My house was next to a school. They bombed the school but fortunately no students were there at the time; students were too scared. It was systematic displacement by bombing us."

He is now unable to find work and is fearful of his ability to afford the fuel needed to protect his children from the winter cold. "My children need food, they need heat", he told AOAV. "We have daily suffering. People are desperate here, but we were happy. I was a real estate worker. I sold houses. I never thought I would be living in a tent."

Many Syrians have been repeatedly displaced within the country. The UN Commission of Inquiry noted in July 2013 that "The spread of the conflict to cities once viewed as safe has forced many Syrians into recurrent displacement." ⁴³ Shelling and air strikes have chased refugees across the country. A quarter of refugees that AOAV spoke with had been displaced within Syria more than once. The consequences of repeated displacement include separation from family members, and the loss of possessions which are further damaged, depleted and left behind with each new forced displacement.

ROUBA



A picture drawn by a young Syrian refugee is seen in the office of Sawa Organisation in Baalbek, Lebanon, 23 November 2013. (Nicole Tung/AOAV)

Rouba is 36-years-old. She and her two young sons fled from Zabadani in Rif Dimashq on 7 March 2013. Her home in Zabadani was destroyed in an airstrike after the family endured 20 days of heavy bombing. "In our house there is an empty well. When the bombing starts we would go and hide in this well. We did this for a while. Then all our neighbours left, and the bombing was getting worse and worse.

We were very scared. Eventually we had to leave. An Air Force rocket actually fell on the house next to us. Three people were killed, and we were so afraid." Rouba's husband has been in detention since February 2012, and so it fell to her to decide to take her family and seek shelter in an area outside Zabadani called Insha'at.

Shortly after the family left Zabadani, Rouba's house was hit by a bomb. Rouba herself was injured when a bullet struck her foot as she tried to return to the area and check on the condition of her house.

Insha'at was intended to be a safe refuge. Many other families from the Zabadani area had already settled there to escape the bombing. Rouba was forced to seek shelter on the 7th floor of an apartment buildingat greater risk from air strikes-because the neighbourhood had become so crowded. She had to break the lock on the door to take refuge in an already-abandoned apartment.

It was only a few days after the family had moved to Insha'at that explosive weapons destroyed their residence for a second time.

"When I was living in this house in Insha'at, my children were staying with our neighbours in a lower floor [...] I had gone upstairs to check on something and forgot my mobile phone. My son came up the stairs to bring me the phone, and that's when the bomb hit the house", she said.

"There was just one wall separating my son from the damage of the bomb. I took the children, came downstairs, stayed that night with our neighbours, and the next day came straight to Lebanon."

Rouba was unable to rescue any possessions from the damaged apartment. Driven from her home for a second time in a matter of days, she fled again with her mother-in-law and her two sons, aged 7 and 4, this time to Lebanon. They now share a single-room, for which they say they pay almost \$300 a month in

The repercussions of these attacks on her home continue to reverberate, especially for her sons.

"The children were very much influenced by what happened to them. My son, the one who was next to the bomb when it exploded, he stopped talking for a couple of days and was shaking all the time. In that area there was still a lot of bombing, and the sounds of departure. Every time they heard the sound of departure they would both be shaking, they were very scared. But now they are here they are better."

Only four out of twenty three refugees polled expressed either the hope or the expectation that they might return to Syria. Half the people who AOAV met with still have family members in the country.



Syrian children are seen in an informal refugee camp in Arsal, Lebanon, on Wednesday, 20 November 2013. Unlike Jordan or Turkey, Lebanon has not attempted to set up formal refugee camps. (Nicole Tung/AOAV)

BOMBED AS THEY RAN

A third of the civilian refugees who spoke with AOAV reported being bombed or shelled as they fled.44

Mohamed Abdullah Al-Ali decided to leave Syria after his left foot was injured by a shell which exploded near him on his way to a market in Qusair in June 2013.

"I left with two shirts and two pairs of pants, and I walked more than 50 kilometres, down the back roads and past checkpoints, to be able to get out [...] Between 5,000 and 10,000 people left Qusair that day; they fled, the women and children.

We were all leaving together, and walking in lines. We would walk only at night, never in the daytime. But the regime would know that there were lines of people, and they would see us and they would bomb us [...] One time a 'vacuum rocket' from the air force fell next to me. I dropped to the floor and hid behind a wall, but I couldn't hear because of the noise."

An average of 15 civilian deaths were recorded by AOAV per incident of air-dropped bombing in Syria.

1 March 2011 - 31 March 2013

Any attacks that deliberately target displaced civilian populations violate fundamental legal principles of distinction and discrimination.45

Additionally, the displaced are particularly vulnerable to explosive weapons. On the move, often in large exposed crowds, displaced civilians have little protection from the wide-area effects of bombs and shells.

As several incidents in Lebanon itself demonstrate, the long range and inaccuracy of many of these weapons means that civilians may not even escape their reach once they have fled the country itself.46

"THE TRIP OF DEATH"

Overnight on the 15-16 November more than 10,000 people fled heavy fighting in the towns of Qarah and Qalamon, close to the Lebanon border.

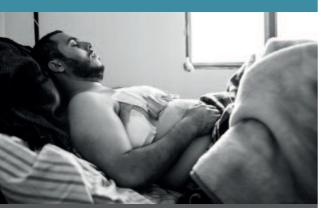
Ahmad was injured on 15 November as he was fleeing on a motorbike. Two shells hit him. The blast from the first blew him off his bike. Fragments from the second pierced his lung while he lay dazed on the ground.

"For fifteen minutes after I was hurt no-one could get near to me because of the shelling. And all of the time I was bleeding very badly."

His cousin Obeida described the weapons that forced their displacement. "They are using ground-to-ground rockets, mortars, rocket launchers, all kind of rockets. They were firing rockets from MiG planes. Houses were falling down in front of my eyes. I saw rockets when I was in Qarah that would fall on a house, and four floors would come down.

We just used to pray. If there was a place to hid, like a doorway, we would hide and cover our eyes. We would panic. All of us were civilians, not fighters. But despite this they set up an artillery base and started firing at us.

When this happened we left our cars and started walking. It was raining. It was night, and there was a distance of 10km [to walk to the border]. It was so cold and we didn't have enough clothes on. When we got closer the people of Aarsal came out and brought us in. But during that period at least 15 people were killed around me in rocket attacks. I call it the trip of death."



Ahmad recovers from surgery on his lung at Aarsal hospital, 20 November 2013. (Nicole Tung/AOAV)

RAHME



Rahme, 28 was injured by a rocket in Qusair as she fled her home. Her injury has caused her to partially lose sight in her left eye. (Nicole Tung/AOAV)

Rahme is 28-years-old. She was injured in October 2013 as she fled with her family from the threat of renewed air strikes in her hometown of Qusair in Homs province.

"I was running away from Qusair. That was when I was injured in my back. I was on a tractor, with my inlaws. My son was in my lap [...] Altogether there were six women and about twenty children on the tractor.

The shelling started the day before we fled. It started with the Air Force, and rocket launchers, and all kinds of bombs. Everybody went down to the shelter and that was where we waited for a whole day.

We decided to leave at dawn so that we could escape from the air strikes. Early at dawn, after the morning prayers, we packed and left. And then, when they heard the sound of our vehicle, that's when they started firing rockets.

The rocket launcher that fired at us was on the mountain. We could see it. Even the children with us could see it.

I couldn't see exactly where it was, but when it was firing I could see the light from the rockets. They started firing at us as we left out houses and kept firing until we had got out of the town."

The rockets that hit Rahme and her family were fired from a multiple rocket launcher.

There are several of these systems in Syria that fire a large number of powerful and unguided rockets, often over great ranges.

One such system is the BM-21 Grad, which can fire as many as forty unguided rockets inside twenty seconds. Each rocket measures over three metres, weighs as much as an adult man and contains almost 20kg of high explosive.47

Fortunately, Rahme's 18-month-old son survived unharmed, but Rahme herself was thrown from the tractor when one of the rockets fell too close.

She is now in a clinic in Lebanon where she awaits specialist treatment for her injuries. Metal fragments

from the rocket hit her back and she has been temporarily paralysed in the left side of her body. While doctors cannot remove the pieces that entered her back, she hopes that with dedicated physiotherapy she will be able to manage these injuries.

What is of greater concern now is the blow she took to her head from the force of the explosion.

Weeks after the attack, as Rahme was seeking treatment in a Syrian hospital, she found that she was beginning to lose her sight.

"When I came here they took me for a scan of my head. The doctors tell me there are some veins that have been affected. I have to stay active and stay awake.

Now, after a little while, I can see some shadows in my left eye."

Her doctor says that Rahme suffered head trauma which has created a blood clot. Swelling caused by the clot has put pressure on the optic nerve. No-one yet knows the extent of the damage, and Rahme is forced to wait for specialist and costly treatment, separated from her children who are in the care of family members seeking refuge elsewhere in Lebanon.

Rahme's house in Syria has since been destroyed, according to her husband who has stayed behind.

"I didn't ask him for details because we don't care about our houses anymore. Our only priority is that we are safe.

We were fleeing, the situation was so bad. We didn't necessarily want to come here [to Lebanon]; we just wanted to get away. We were leaving to go and stay in a safe place, and that's when the incident happened."



Syrians sit in the waiting room of a clinic in northern Lebanon, 21 November 2013. (Nicole Tung/AOAV)

LOST LIVELIHOODS

80% of incidents of explosive violence in Syria were recorded by AOAV in towns and cities.

1 March 2011 - 31 March 2013

Most of the Syrian refugees that AOAV met with were unable to work. Only five of the 23 civilian refugees interviewed were either employed or their partners were. Those who were working were notably underemployed, or had secured only short-term contracts.

Refugees in Syria have a theoretical right to work in Lebanon. However, with an already high unemployment rate of 11 per cent now compounded by the population increasing in size by almost a quarter in two years, jobs are hard to find for refugees.⁴⁸

Long-term refugees have a precarious legal status in Lebanon that compounds these underlying problems. Refugees are entitled to free residency permits for up to a year after entry. After that point visa extensions cost \$200 per person. Those refugees who cannot or do not pay are no longer entitled to work or remain in the country.⁴⁹

The loss of livelihoods is an issue that is not restricted solely to those whose displacement has been caused by explosive weapons. However the use of explosive weapons in populated areas in Syria has created personal financial and livelihood crises for refugees in three ways.

Only five of the 23 civilian refugees interviewed were either employed or their partners were.

LOST OPPORTUNITIES

By driving people from their homes and livelihoods in Syria, explosive weapons deprive people of their means of income.

Abu and his brother owned a decorating factory outside Damascus where they employed between 18 and 20 people. His family lived in the Tadumon area, but moved to Yarmouk—a permanent camp in southern Damascus for Palestinian refugees—to escape the clashes and shelling. They were forced to move several times over the course of a year to escape shelling in the area, before finally coming to Lebanon in July 2013.

Abu's home was destroyed, as was the house he built for his son. He now lives in Beirut in a two-bedroom apartment with 16 members of his extended family, most of whom are children. Despite being a highly-skilled worker, Abu, now aged 60, is unable to find employment.

"It is the most difficult thing to deal with", he said. "We don't want to beg, we don't want to live like beggars and beg for a good life. We were never poor in Syria; we were hard workers [...]

All of a sudden everything stops. It's like when you're watching a movie and everything stops."

As Palestinian refugees, Abu's family have a particularly precarious status. They are subject to a different visa policy from Syrian refugees in Lebanon, and services are provided to them not by UNHCR but by the dedicated agency for refugees from the Palestinian territories.⁵⁰

Moreover this is the second time that his family have been displaced to a new country.

"We've had enough displacement [...] I worked so hard for 50 years to build a house for me and a house for my son. After all this hard work I am back to square zero. I don't know if I can go back and build my house again. I don't have the money."



A father and son start a fire with wood collected from nearby trees at an informal settlement camp for Syrian refugees, 22 November 2013. (Nicole Tung/AOAV)

LOST CAPACITY

The severe and long-term injuries that explosive weapons cause can restrict and prevent victims from returning to work in their previous capability.

Mohamed was a carpenter in Syria. He fled Qusair after his home and workshop were destroyed. Mohamed himself is still carrying at least 15 fragments of the shell that struck him. He works still as a carpenter now in Lebanon, but only for one week a month. He is now trapped in a cycle, as his injury is restricting his ability to work, and he cannot earn enough money to afford treatment. "I need an X-ray; I need to know if they [the shrapnel pieces] are moving or if they are stable [...] I cannot afford treatment, because I have to pay the rent and support my family in Syria [...] I didn't go and look for treatment because I have no money. If the doctor tells me that I need an operation, I can't afford one, and I can't stop now."

LOST BREADWINNERS

Many families have lost their primary earners as a result of explosive violence. The loss of family breadwinners will fundamentally change the structure and roles of surviving family members. Naseera's son joined the FSA after the family's home was destroyed in the bombardment of Baba Amr in February 2012. He was killed by a rocket, leaving behind his pregnant wife and five children. Naseera, who herself was severely wounded in her right leg in Baba Amr and is still struggling to treat the resulting infection, is now responsible for providing for them.51

Nine of the fourteen wounded civilians interviewed by AOAV had suffered injuries to limbs which requires physiotherapy of prosthetics.

SALIM



Salim, 15, pushes himself in a wheelchair at a clinic in northern Lebanon on 19 November 2013, Salim was injured by an air-dropped bomb, in which both of his legs had to be amputated. (Nicole Tung/AOAV)

Salim is 15-years-old and is from the town of Qusair in Homs governorate.

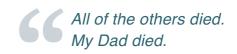
His father, who was a carpenter, had not been fighting in the battle, but as casualties mounted Salim and his father began to volunteer to help as emergency paramedics.51 In July 2013, Salim and his father were struck by an air-dropped bomb.

"I was in a car with my Dad, escorting the wounded [in Qusair]. We were sitting in a mini-van, there were 25 people in it.

All of the others died. My Dad died.

A bomb hit us from above, all I remember is falling on the ground."

Salim was the only survivor. He lost both his legs above the knee, amputated at the scene of the blast. He is now in Lebanon with his mother, older sister, and younger brother. None are working, and the family stays with Salim in the clinic while he recovers and awaits new prostheses. His wheelchair was provided by an international NGO working in the area.



"I was in the 9th grade. I liked school. I liked mathematics. I want to be a carpenter like my father.

I need a physio course for a month, and then they will give me new legs.

They give me pocket money here too."

CONCLUSION

The stories told here will have been repeated countless times across Syria and its neighbouring countries. Every day, another home is destroyed, another family torn apart, by the use of explosive weapons in populated areas.

These testimonies represent just a snapshot of lives affected by explosive violence.

They are but a few stories, and can tell only part of the diverse harm caused by Syria's bombs, shells, and rockets. What is clear, though, is that explosive weapons which affect a wide area have long-term, often life-long, impacts on civilians.

But while the world's attention should rightly be focused on Syria, it is not just here that these patterns are seen. In 2012 AOAV recorded casualties from explosive weapons in 58 countries and territories.⁵³ Over the past few years, explosive weapons with wide-area effects have been used in populated areas across Libya, Yemen, Sri Lanka, Sudan, Gaza and Afghanistan, to name just a few.

The world is starting to take notice and take action. The United Nations, the ICRC and an increasing number of states are making the use of explosive weapons in populated areas a key protection concern.⁵⁴ The United Nations Secretary-General has repeatedly called attention to the issue.⁵⁵

Change will come too late for the people whose stories are told here, but urgent change is needed to reduce the likelihood of this pattern of explosive violence continuing.

AOAV is a founding member of the International Network on Explosive Weapons (INEW).⁵⁶ Together with other INEW members, AOAV calls on states and all users of explosive weapons, as a matter of urgency;

- To acknowledge the unacceptable harm caused by the use of explosive weapons in populated areas;
- To strive to avoid harm by reviewing and strengthening national policies and procedures;
- ➤ To work towards fulfilling the rights of victims of explosive violence; and
- ➤ To develop stronger international standards, including prohibitions and restrictions on the use of explosive force.



A refugee in Aarsal shows footage of a bombing in Qarah, Syria on his phone. (Nicole Tung/AOAV)

RECOMMENDATIONS

STOP BOMBING CIVILIANS

- All parties to the Syrian conflict must immediately refrain from using explosive weapons in populated areas.
- Such a commitment should form part of any future negotiations such as the Geneva talks that are scheduled to take place on 22 January 2014. This commitment should build on the proposals made by the United Nations to cease all use of heavy weapons in population centres.⁵⁷
- States should stop providing explosive weapons to conflict parties which are further perpetuating this pattern of violence against civilians.
- States should publically condemn any use in populated areas of explosive weapons with wide-area effects in use in Syria.

COUNTING THE COST

- All parties to the Syrian conflict should ensure that they document the impact of explosive weapons in a systematic, comprehensive and transparent way. They should also ensure that they respect and support civil society organisations which are recording casualties of the conflict.⁵⁸
- In order to build evidence of the impact of explosive weapons, data should be disaggregated at a minimum by death and injuries, age and sex of the victims, and the date and location of the event. This data should be made available to the public.

SUPPORT VICTIMS OF EXPLOSIVE VIOLENCE

- As a matter of urgency, states should increase funding efforts to support UNHCR and the Government of Lebanon to meet the needs of refugees in Lebanon.
- ➤ The Government of Lebanon should relax its visa extension fees so that Syrian refugees have a right to remain in the country. This will remove a daunting financial burden for large refugee families in particular.
- UNHCR should ensure that under its current policy of targeting its resources at the most vulnerable that it is making decisions based on the fairest and most informed criteria. UNHCR should also ensure an easily-accessible appeal process for refugees to refer themselves for specific services.
- International organisations and humanitarian civil society organisations operating in Lebanon should create a joint database of victims of the conflict in Syria in order to facilitate coordination of support to them and ensure outreach to all of them.
- Charities and NGOs operating in healthcare need urgent support, especially in the provision of longerterm medical needs such as physiotherapy and psychological counselling. Donors should prioritise support for local, community-based assistance.⁵⁹
- States and other actors should understand that the economic effects of explosive violence are extremely long-lasting and should look to support rebuilding and reconstruction. This includes preparing for clearance of explosive remnants of war (ERW) as soon as the security situation permits.

NOTES

- 1 See for example, Action on Armed Violence, "Syria: The Explosive Truth," 8 July 2013, http://aoav.org.uk/2013/syria-the-explosive-truth/; Henry Dodd and Robert Perkins, "An Explosive Situation: Monitoring explosive violence in 2012," Action on Armed Violence, April 2013, http://aoav.org.uk/wp-content/uploads/2013/ 06/An-Explosive-Situation-Explosive-Violencein-2012.pdf?1a98d (accessed 13 December 2013).
- 2 Henry Dodd and Robert Perkins, "An Explosive Situation: Monitoring explosive violence in 2012," Action on Armed Violence, April 2013, http://aoav.org.uk/wp-content/uploads/2013/ 06/An-Explosive-Situation-Explosive-Violencein-2012.pdf?1a98d (accessed 13 December 2013).
- Four of the fourteen refugees were injured in or near a market. The definition of a populated area used by AOAV is based on Protocol III of the 1980 Convention on Certain Conventional Weapons (CCW) which defines concentrations of civilians as: "Any concentrations of civilians, be it permanent or temporary, such as in inhabited parts of cities, or inhabited towns or villages, or as in camps or columns of refugees or evacuees, or group of nomads." The full definition is available at: "Protocol on Prohibitions or Restrictions on the Use of Incendiary Weapons (Protocol III)," ICRC, Geneva, 10 October 1980, www.icrc.org/ihl.nsf/FULL/515 (accessed 7 December 2013).
- 4 The UN said in April 2013 that there were at least 1.2m damaged or destroyed houses in Syria. United Nations Office for the Coordination of Humanitarian Affairs (OCHA), "Humanitarian Bulletin, Syria" Issue 22, 19 March—8 April 2013, http://reliefweb.int/sites/reliefweb.int/ files/resources/Syria%20Humanitarian%20 Bulletin%20-%20Issue%2022.pdf (accessed 17 December 2013)
- The Violations Documentation Center (VDC) is a Syrian casualty recording organisation which disaggregates fatalities in the Syrian conflict by cause. From 1 January 2011 to 1 December 2013 the VDC recorded a total of 59,334 civilian deaths. Explosive weapons, identified by the VDC as 'Explosion', 'Shelling', 'Warplane shelling' were responsible for 29,246 of these (49% of total). Data accurate as of 17 December 2013. www.vdc-sv.info

- 6 UNHCR, "Syria Regional Refugee Response," Last updated 11 December 2013, http://data.unhcr.org/syrianrefugees/country. php?id=122 (accessed 12 December 2013).
- 7 "Places of Origin of Syrian Refugees Registered in Lebanon, as of 30 November 2013", Map available from UNHCR, "Syria Regional Refugee Response," http://data.unhcr.org/ syrianrefugees/country.php?id=122 (accessed 12 December 2013).
- 8 Robert Perkins, "Investigation: Syria's Dirty Dozen," Action on Armed Violence, 23 September 2013, http://aoav.org.uk/2013/syrias-dirty-dozen/ (accessed 18 December 2013).
- 9 Action on Armed Violence, "Syria's Dirty Dozen: The Luna-M/Frog-7," (September 2013), http://aoav.org.uk/2013/syrias-dirty-dozen-lunamfrog-7/ (accessed 16 December 2013).
- 10 Action on Armed Violence, "Syria's Dirty Dozen: The M-240," (September 2013), http://aoav.org.uk/2013/syrias-dirty-dozen-m-240/ (accessed 16 December 2013).
- 11 Action on Armed Violence, "Syria's Dirty Dozen: The OFAB 100-120," September 2013, http://aoav.org.uk/2013/syrias-dirty-dozen-ofab-100/ (accessed 16 December 2013).
- 12 Doctor Latakia's name has been withheld for his protection, and he is instead identified by the province where he lived in Syria.
- 13 In 2011 for example, 34% of all casualties recorded from English-language media sources were reported as fatalities. Henry Dodd and Robert Perkins, "Monitoring explosive violence: The EVMP dataset in 2011," Action on Armed Violence, March 2012, http://aoav.org.uk/wp-content/uploads/ 013/06/EVMP-dataset-2011.pdf (accessed 10 December 2013).
- 14 AOAV interviews with medical staff in Lebanon. November 2013.
- 15 For example, the lungs are the second mostcommonly injured organ following exposure to primary blast and carries the highest mortality risk, requiring specialist treatment. C. Giannou, M. Baldan, and A. Molde, "War Surgery: Working with limited resources in armed conflict and other situations of violence," International Committee of the Red Cross and Red Crescent (ICRC), www.icrc.org/ eng/assets/files/publications/icrc-002-4105.pdf

- 16 On 2 December 2013 a Syrian refugee camp in Qsar Naba was burnt down amid reports of escalating tensions between Lebanese and Syrian communities. Loveday Morris and Ahmed Ramadan, "Torched Syrian camp in Lebanon illustrates tension between refugees, residents," The Washington Post, 5 December 2013, www.washingtonpost.com/ world/torched-syrian-camp-in-lebanon-illustratestension-between-refugees-residents/2013/12/04/ 94f81b42-5cf6-11e3-8d24-31c016b976b2 story.html (accessed 11 December 2013).
- 17 ALEF-Act for Human Rights and IKV-Pax Christi, "Two Years On: Syrian Refugees in Lebanon," September 2013, http://archive.paxchristi.net/ 2013/2013-0397-en-me-HS.pdf (accessed 8 December 2013).
- 18 UNHCR, "Report on Secondary and Tertiary Health Care," January-June 2013, available for download at data.unhcr.org
- 19 AOAV, Interview with Roberta Russo, Communications Officer, UNHCR, Beirut, 18 November 2013.
- 20 AOAV, Interview with Roberta Russo, Communications Officer, UNHCR, Beirut, 18 November 2013.
- 21 For example, AOAV interview with Salam, Tripoli, 21 November 2013. Salam reported that he needs to find a sponsor to provide funding for treatment to his leg, which was injured when a shell exploded near him in Homs in August 2012. The high cost in Lebanon was also repeatedly juxtaposed by refugees with free and low-cost medical care received in Syria prior to the conflict.
- 22 UNHCR, "States Parties to the 1951 Convention relating to the Status of Refugees and the 1967 Protocol," Last updated 1 April 2011, www.unhcr.org/3b73b0d63.html (accessed 18 December 2013).
- 23 Human Rights Watch, "Syria: Fighter Planes Strike Aleppo Hospital," 15 August 2012, www.hrw.org/news/2012/08/15/syria-fighterplanes-strike-aleppo-hospital (accessed 5 December 2013).
- 24 World Bank, "Lebanon: Economic and Social Impact Assessment of the Syrian Conflict," September 2013, www.worldbank.org/content/ dam/Worldbank/document/MNA/LBN-ESIA% 20of%20Syrian%20Conflict-%20EX%20 SUMMARY%20ENGLISH.pdf (accessed 11 December 2013).
- 25 AOAV interview with medical staff, Lebanon, 22 November 2013.
- 26 See for example, National Center for Injury Prevention and Control, "Blast Injuries: Fact

- Sheets for Professionals", U.S. Department of Health and Human Services, www.bt.cdc.gov/ masscasualties/pdf/blast_fact_sheet_ professionals-a.pdf (accessed 8 December 2013).
- 27 AOAV interview with 'Dr Homs' and 'Dr Latakia' (real names withheld), Lebanon, 21 November
- 28 AOAV interviews with medical staff in Lebanon, November 2013.
- 29 Action on Armed Violence, interview with Ibrahim, Tripoli, 19 November 2013.
- 30 Save the Children, "Devastating Impact, Explosive Weapons and Children," 2011, www.unicef.org/ protection/Devastating_Impact_low_res.pdf (accessed 10 December 2013).
- 31 AOAV interview with medical staff, Lebanon, 22 November 2013.
- 32 Save the Children, "Untold Atrocities, The Stories of Syria's Children," September 2013, www.savethechildren.org.uk/sites/default/files/ images/untold_atrocities.pdf (accessed 10 December 2013).
- 33 AOAV interview with medical staff, Lebanon, 22 November 2013.
- 34 Christian Jepsen, "Lebanese border-town receives up to 10,000 Syrian refugees overnight," Norwegian Refugee Council, 25 November 2013, www.nrc.no/?did=9686118 (accessed 5 December 2013).
- 35 Robert King: "Ground Zero Syria: Al Qusayr Field Hospital," VICE, 23 October 2012, www.vice.com/en_uk/ground-zero/syria-assadschild-victims (accessed 11 December 2013).
- 36 United Nations Security Council, "Report of the Secretary-General on the Protection of Civilians in Armed Conflict," 22 May 2012, S/2012/376, www.securitycouncilreport.org/atf/cf/% 7B65BFCF9B-6D27-4E9C-8CD3-CF6E4FF96FF9%7D/s_2012_376.pdf (accessed 7 December 2013).
- 37 Save the Children, "Childhood under fire: The impact of two years of conflict in Syria," 2013, www.savethechildren.org.uk/sites/default/files/ images/Childhood Under Fire.pdf
- 38 "Syria reconstruction would cost \$73 billion: report," AFP in Hurriyet Daily News, 3 September 2013, www.hurriyetdailynews.com/syriareconstruction-would-cost-73-billion-report.aspx? pageID=238&nID=53741&NewsCatID=352 (accessed 12 November 2013).
- 39 AOAV interview with Amira, Beirut, 18 November 2013.

- 30
- 40 United Nations High Commissioner for Refugees (UNHCR), "Syrian Arab Republic," www.unhcr.org/pages/49e486a76.html (accessed 9 December 2013)
- 41 The Commission recounted attacks in the Qusair region of Homs, and in north-eastern Damascus, in which there was deliberate or indiscriminate bombardment of areas hosting internally displaced people. United Nations General Assembly, "Report of the independent international commission of inquiry on the Syrian Arab Republic," Human Rights Council, 16 August 2013, www.ohchr.org/EN/HRBodies/HRC/IICISyria/ Pages/IndependentInternationalCommission.aspx (accessed 9 December 2013).
- 42 Name withheld at request of interviewee.
- 43 United Nations General Assembly, "Report of the independent international commission of inquiry on the Syrian Arab Republic," Human Rights Council, Twenty-third session, 18 July 2013
- 44 For example, Lasik, 17, suffered serious blast injuries to the right side of his face after an artillery shell was fired at him as he was fleeing Yabroud in Rif Dimashq on 20 November 2013. AOAV interview, Aarsal, 20 November 2013.
- 45 The Geneval Conventions of 1949 and their Additional Protocols, www.icrc.org/eng/war-and-law/treaties-customary-law/geneva-conventions (accessed 11 December 2013).
- 46 Human Rights Watch, "Lebanon/Syria: End Indiscriminate Cross-Border Attacks," 22 April 2013, www.hrw.org/news/2013/04/22/lebanonsyria-end-indiscriminate-cross-border-attacks-2
- 47 Action on Armed Violence (AOAV), "Syria's Dirty Dozen: The Grad," September 2013, http://aoav.org.uk/2013/syrias-dirty-dozen-grad/
- 48 World Bank Group, "Lebanon: Economic and Social Impact Assessment of the Syrian Conflict," 20 September 2013, www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2013/09/24/000333037_20130924111238/Rendered/PDF/810980LB0box379831B00P14754500PUBLIC0.pdf, p. 82 (accessed 10 December 2013).
- 49 ALEF-Act for Human Rights and IKV-Pax Christi, "Two Years On: Syrian Refugees in Lebanon," September 2013, http://archive.paxchristi.net/ 2013/2013-0397-en-me-HS.pdf (accessed 7 December 2013).
- 50 United Nations Relief and Works Agency for Palestine Refugees in the Near East (UNRWA),

- "PRS in Lebanon," www.unrwa.org/prs-lebanon (accessed 10 December 2013).
- 51 AOAV Interview with Naseera, Tripoli, 21 November 2013.
- 52 This is a widespread phenomenon in Syria, in part because of a lack of recognised ambulances. In March 2013 Medicines Sans Frontieres reported that there were only about a dozen working ambulances in the whole of Aleppo province. Medicines Sans Frontieres, "Syria Two Years On: The Failure of International Aid," 6 March 2013, www.doctorswithoutborders.org/publications/article.cfm?id=6669 (accessed 11 December 2013).
- 53 Henry Dodd and Robert Perkins, "An Explosive Situation: Monitoring explosive violence in 2012," Action on Armed Violence, April 2013, http://aoav.org.uk/wp-content/uploads/2013/06/ An-Explosive-Situation-Explosive-Violence-in-2012.pdf?1a98d (accessed 13 December 2013).
- 54 OCHA and Chatham House, "Expert meeting on reducing the humanitarian impact of the use of explosive weapons in populated areas," London, 23-24 September 2013, http://reliefweb.int/sites/reliefweb.int/files/resources/Expert%20Meeting% 20on%20EWIPA%20-%20Summary%20Report.pdf (accessed 13 December 2013).
- 55 See for example, United Nations Secretary-General Ban Ki-moon, "Report of the Secretary-General on the protection of civilians in armed conflict," UN Security Council, S/2012/376, 22 May 2012, http://www.refworld.org/pdfid/4a3b94792.pdf (accessed 13 December 2013).
- 56 International Network on Explosive Weapons, www.inew.org
- 57 This recommendation formed part of the six-point proposal issued by then-Joint Special Envoy of the United Nations and the League of Arab States, Kofi Annan. "Statement by the President of the Security Council," United Nations Security Council, 5 April 2012, S/PRST/2012/10, http://daccess-dds-ny.un.org/doc/UNDOC/GEN/N12/285/18/PDF/N1228518.pdf?OpenElement (accessed 13 December 2013).
- 58 Recent kidnappings in Syria of casualty recording practitioners demonstrate the challenging environment in which this vital work is carried out. See, Every Casualty Campaign, Statement on IPN member abducted in Syria, December 2013, http://www.everycasualty.org/newsandviews/syrian-ipn-member-abducted (accessed on 13 December 2013).