STATE OF CRISIS: EXPLOSIVE WEAPONS IN YEMEN
ABOUT UN OCHA
The Office for the Coordination of Humanitarian Affairs (OCHA) is the part of the United Nations Secretariat responsible for bringing together humanitarian actors to ensure a coherent response to emergencies. OCHA also ensures that there is a framework within which each actor can contribute to the overall response effort. OCHA’s core functions are coordination, policy, advocacy, information management and humanitarian financing. Our mission is to:

- Mobilize and coordinate effective and principled humanitarian action in partnership with national and international actors in order to alleviate human suffering in disasters and emergencies;
- Advocate the rights of people in need;
- Promote preparedness and prevention; and
- Facilitate sustainable solutions.

OCHA has a unique mandate to speak out on behalf of the people worst affected by humanitarian situations. Our ultimate goal is to save more lives and reduce the impact of conflicts and natural disasters.

ABOUT AOAV
Action on Armed Violence (AOAV) is a UK-based charity working to reduce harm and to rebuild lives affected by armed violence.

AOAV works with communities affected by armed violence, remove the threat of weapons, reduce the risks that provoke violence and conflict, and support the recovery of victims and survivors.

AOAV’s global explosive violence monitor, launched in October 2010, tracks the incidents, deaths and injuries from explosive weapon use reported in English-language media sources. AOAV does not attempt to comprehensively capture every incident of explosive weapon use around the world, but to serve as a useful indicator of the scale and pattern of harm to civilians.

AOAV is a founding member of the International Network on Explosive Weapons (INEW), an NGO partnership calling for immediate action to prevent human suffering from the use of explosive weapons in populated areas.
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KEY TERMS

The following key terms are used by AOAV’s Explosive Violence Monitor. An explanation of AOAV’s methodology is on page 16.

**Casualty:**
Refers to people who were killed or physically injured.

**Civilian/armed actor or security personnel:**
Casualties were recorded as ‘armed actors’ only if they were reported as being part of the state military, members of non-state armed groups, or security personnel who AOAV considers likely to be armed. This includes police, security guards, intelligence officers and paramilitary forces. All casualties not reported as belonging to these armed groups were recorded as civilians.

**Explosive violence incident:**
Refers to the use of explosive weapons that caused at least one death or injury and took place in a 24-hour period in a specified geographical location.

**Populated area:**
AOAV’s definition of a populated area 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 groups of nomads.”

Incidents recorded by AOAV are designated as occurring in populated areas likely to contain concentrations of civilians if: a) It is stated in the source (e.g. a busy street, a crowded market); b) If an incident occurs in or near a pre-defined location which is likely to contain concentrations of civilians e.g. commercial premises, entertainment venues, hospitals, hotels, encampments (containing internally displaced persons, refugees, nomads), markets, places of worship, public gatherings, public buildings, public transport, schools, town centres, urban residential neighbourhoods, villages/compounds.

**Explosive weapon types**
Weapons are classified by AOAV based on consistently-used language in media reporting. The categories used are deliberately broad in order to capture a range of different weapon types.

**Air-launched explosive weapons:**
Any aerial bomb, rocket or missile delivered by an aircraft. This includes helicopters, planes and unmanned aerial vehicles (drones).

**Ground-launched explosive weapons:**
This grouping covers a wide range of manufactured conventional ordnance delivered from a variety of surface-level platforms. In Yemen, this category refers to the use of primarily indirect-fire weapons like mortars, rockets and artillery.

**Improvised explosive devices (IEDs):**
IEDs cover all homemade explosive weapons, and include car bombs, roadside bombs, and devices detonated by a suicide bomber.
INTRODUCTION

In March 2015, a complex and long-running political crisis in Yemen rapidly escalated into all-out conflict. Over the previous six months the country had seen steadily-worsening armed violence as armed groups, commonly referred to as Houthis or Ansar Allah, took control of large parts of the country including the capital city Sana’a. After President Hadi fled the country, on 26 March a coalition, led by Saudi Arabia, began an operation of air strikes in Yemen at the request of the Government of Yemen.\(^2\)

As fighting has spread across the country, millions of civilians in Yemen are suffering from the devastating consequences of armed violence.\(^3\) As of 10 September 2015 the United Nations Office of the High Commissioner for Human Rights (OHCHR) had registered 2,204 civilian deaths and 4,711 civilian injuries from armed violence in Yemen.\(^4\) These figures include civilian deaths and injuries from all forms of armed violence in Yemen, including but not limited to the use of explosive weapons.

Civilians are bearing the brunt of the violence in Yemen, and a population already suffering desperate poverty, insecurity, malnutrition and limited access to health and sanitation is now facing a severe humanitarian emergency. Aid agencies on the ground estimate that some 21 million people – 80 per cent of the entire population – are in need of some form of humanitarian protection or assistance. This is a 33 per cent increase in needs since the conflict began.\(^5\)

The spiralling violence in Yemen in 2015 has been characterised by the use of explosive weapons with wide-area effects in populated areas. All parties to the conflict have repeatedly used heavy explosive weapons in fighting since March, including in populated areas. In addition to aerial bombing in the capital Sana’a and other locations across the country, southern governorates in particular have seen heavy ground fighting with rockets and mortars between Houthi militants and government allied fighters. As a further threat to the protection of civilians, Islamic State in Iraq and the Levant (ISIL) and Al-Qaeda in the Arabian Peninsula (AQAP) have carried out deadly bombings as they take advantage of the insecurity gripping Yemen.

This paper investigates the humanitarian impact of the use of explosive weapons in populated areas in Yemen during the conflict up to 31 July 2015.
EXPLOSIVE WEAPONS: A BACKGROUND

Explosive weapons affect an area with blast, heat and fragmentation. There are many types of explosive weapons, including large aircraft bombs, tank shells, mortars and improvised explosive devices (IEDs). These weapons differ in their method of delivery and scale of effects, but all have the capacity to cause deaths, injuries, and damage to anyone or anything around the point of detonation.

HUMANITARIAN IMPACT

When explosive weapons are used in populated areas such as markets, places of worship or residential areas, civilians are exposed to a high risk of harm. The risk to civilians is particularly high when explosive weapons with ‘wide-area effects’ are used in populated areas. Wide-area effects may result from the large blast or fragmentation radius of the individual weapon, the inaccuracy of the weapon’s delivery to a target, the use of multiple warheads across an area, or a combination of these three characteristics. 6

As well as the threat of death and injury to civilians, explosive weapons consistently cause severe and long-lasting damage to homes, services and infrastructure such as hospitals, schools, and sanitation and energy supply systems. Livelihoods are also devastated as commercial property and means of production (factories, livestock etc.) are damaged or destroyed in attacks involving explosive weapons. The use of explosive weapons in populated areas is a major driver of displacement as people are forced to flee due to the fear of, or as a result of, explosive weapon attacks. Explosive weapons also leave explosive remnants of war (ERW), which can continue to pose a serious threat to civilians, in particular children, for decades after a conflict has ended. 7

EXPLOSIVE WEAPONS AND INTERNATIONAL HUMANITARIAN LAW

International Humanitarian Law (IHL) contains important provisions for the protection of civilians in armed conflict, including from the effects of explosive weapons. Through the principles of proportionality, distinction and precaution, parties to conflict are obliged to limit loss of civilian life, injury to civilians and damage to civilian objects as far as possible.

Across the globe, greater compliance with IHL by all parties to conflict would significantly enhance the protection of civilians from the effects of explosive weapons. In addition, it is increasingly recognised that stronger policy standards to curb or limit the use in populated areas of explosive weapons, particularly those with wide-area effects, would provide additional protection to civilians. 8

GROWING RECOGNITION OF A GLOBAL PROBLEM

The continued use of explosive weapons in populated areas, in many different countries and context around the world, has emerged over recent years as a key concern in the protection of civilians. Since 2009, the United Nations Secretary-General has repeatedly called on Member States to recognise and address this critical humanitarian issue. 9

He has called upon all parties to conflict – national armed forces and non-state armed groups – to refrain from the use of explosive weapons with wide-area effects in populated areas, and he has recommended that the Security Council, whenever relevant, expressly call upon parties to conflict to refrain from such use. Growing international recognition of the severe pattern of civilian harm has seen more than 40 countries speak out and acknowledge this humanitarian problem. 10

“Many wounded are laid on the floor, we have only 130 beds. To ease the pressure on the morgue, which is filled with bodies, we took pictures of bodies and buried them if none of their relatives came to receive them the same day […] I have eight children and my sister is living with me too. My children find it difficult to go to school like most of the children now as they are awake all night.”

Yousif, a doctor at a hospital in Taizz, April 2015 11
YEMEN: THE IMPACT OF EXPLOSIVE WEAPONS

Since 2011, UK-based charity Action on Armed Violence (AOAV) has monitored the immediate humanitarian impact of explosive weapon use worldwide. The monitor records deaths and physical injuries reported in English-language media sources. The remainder of this paper presents data collected by AOAV on reported explosive violence in Yemen between 1 January and 31 July 2015.

No claims are made that this sample of data can represent the total impact of explosive weapons on civilians. It is instead intended to inform an understanding of patterns of harm to civilians. A full explanation of AOAV's methodology is included on page 15 in this paper. The intensity of armed violence in Yemen in recent months, and the limited access for journalists and investigators on-the-ground makes it particularly challenging to capture the full scale of ongoing explosive weapon use in the country.

Civilians have borne the brunt of explosive violence in Yemen in 2015. AOAV recorded 124 incidents of explosive violence in Yemen between 1 January and 31 July 2015 (see infographic overleaf). In these incidents, a total of 5,239 deaths and injuries from explosive weapon use were recorded.

Of these, 4,493 were civilians (1,363 civilian deaths and 3,130 civilian injuries). This means that civilians have made up 86 per cent of deaths and injuries that AOAV has recorded from explosive weapons in Yemen between 1 January and 31 July 2015.

The intensity of explosive violence in the country has meant that more civilian deaths and injuries from explosive weapons were recorded in Yemen during the first seven months of 2015 than in any other country in the world.
The majority of explosive weapon use reported in Yemen has taken place in populated areas. Of the 124 incidents recorded by AOAV between 1 January and 31 July 2015, 60 per cent (75 incidents) were recorded in towns, cities, and villages of Yemen. When explosive weapons were used in populated areas, civilians made up 95 per cent of reported deaths and injuries. This compares to 51 per cent in other areas.

The spread of conflict in 2015 can be seen clearly in the infographic overleaf. AOAV recorded at least one death or injury from explosive weapon use in 18 of Yemen’s 21 governorates (provinces) between 1 January and 31 July 2015.14 Civilian deaths and injuries outnumber armed actors in 12 governorates. Sana’a, home to the most populous city in Yemen, is the most-affected governorate with 2,361 recorded civilian deaths and injuries. More than half (53 per cent) of the reported civilian toll from explosive violence in Yemen was recorded in the capital city and surrounding districts. Other governorates with high numbers of civilian deaths and injuries include Aden (19 per cent of civilian deaths and injuries reported in Yemen), Hajjah (10 per cent), and Taiz’z (9 per cent).

AOAV loosely groups explosive weapons into three categories: air-launched explosive weapons, ground-launched explosive weapons, and IEDs. All three launch methods of explosive weapons have had a terrible humanitarian impact on civilians in Yemen, not only causing a high number of deaths and injuries but also causing severe psychological suffering, damaging homes and civilian infrastructure, and driving displacement and insecurity.

The impact of explosive weapons in Yemen goes far beyond the immediate deaths and injuries recorded by AOAV. The testimonies and experiences of victims and witnesses illustrate some of the long-term impacts that can cause extensive suffering far into the future, even after the fighting has ended. The next section of this paper shares the stories and experiences of people affected by the use of explosive weapons in populated areas in Yemen during the fighting in 2015.

“Almost 8.6 million people are in urgent need of medical help […] people continue to suffer not only from war-related injuries, but from inability to get basic treatment for the most common health conditions, or get obstetric care during childbirth.

As the conflict continues, more lives are lost every day, not just due to the violence, but as a health system that has been seriously damaged barely copes with the extraordinary needs posed by the unrelenting violent conflict and can no longer provide them with the health services they need to stay alive. The health and lives of millions of people are at risk.”

Dr Margaret Chan, Director-General of the World Health Organization, 27 May 201515
INCIDENTS OF EXPLOSIVE VIOLENCE, JAN-JULY 2015 IN YEMEN

75 (60%) INCIDENTS IN POPULATED AREAS
49 (40%) INCIDENTS IN NON-POPULATED AREAS

DEATHS AND INJURIES FROM EXPLOSIVE VIOLENCE IN YEMEN, JAN-JULY 2015

5,239
TOTALRecorded
DEATHS AND INJURIES

4,493 (86%) DEATHS AND INJURIES FROM EXPLOSIVE VIOLENCE WERE CIVILIANS

3,926 (95%) OF DEATHS AND INJURIES IN POPULATED AREAS WERE CIVILIANS

567 (51%) OF DEATHS AND INJURIES IN OTHER AREAS WERE CIVILIANS

CIVILIAN DEATHS AND INJURIES FROM EXPLOSIVE VIOLENCE

AIR-LAUNCHED EXPLOSIVE WEAPONS

60% OF CIVILIAN DEATHS AND INJURIES

2,682
CIVILIAN DEATHS AND INJURIES

35/71 INCIDENTS (49%) IN POPULATED AREAS

93% OF DEATHS AND INJURIES IN POPULATED AREAS WERE CIVILIANS

GROUND-LAUNCHED EXPLOSIVE WEAPONS

23%

1,037
CIVILIAN DEATHS AND INJURIES

25/33 INCIDENTS (76%) IN POPULATED AREAS

94% OF DEATHS AND INJURIES IN POPULATED AREAS WERE CIVILIANS

IMPROVISED EXPLOSIVE DEVICES (IEDs)

17%

774
CIVILIAN DEATHS AND INJURIES

15/20 INCIDENTS (75%) IN POPULATED AREAS

97% OF DEATHS AND INJURIES IN POPULATED AREAS WERE CIVILIANS

from 01 January to 31 July 2015
The hardest-hit provinces, Jan-July 2015 in Yemen

Civilian deaths and injuries from explosive violence:
- 500+
- 100-500
- 10-100
- 1-9
- Only armed actors
- No recorded casualties

Monthly deaths and injuries from explosive violence, Jan-July 2015 in Yemen

Average deaths and injuries per day so far in 2015

21 civilians

4 armed actors

All data from AOAV Explosive Violence Monitor
Air-launched explosive weapons include any bomb, rocket or missile delivered by an aircraft. The majority of reported civilian deaths and injuries from explosive violence in Yemen from 1 January to 31 July 2015 (60 per cent) were caused by air-launched explosive weapons such as missiles and large aircraft bombs. AOAV recorded a total of 3,287 deaths and injuries in Yemen from aerial explosive weapons. Of these, 82 per cent were reported to be civilians (2,682 civilian deaths and injuries).

Coalition air strikes began in Yemen on 26 March 2015. Between 26 March and 31 July AOAV recorded 63 air strike incidents that resulted in reported deaths and injuries. A total of 835 civilian deaths and 1,847 civilian injuries were reported in these incidents. There have been several air strikes which have resulted in a large number of civilian deaths and injuries in Yemen, such as the bombing of a displacement camp in Mazraq on 30 March which killed at least 40 people, or when as many as 65 civilians died when six bombs fell on a residential compound in the port city of Mokha on 24 July. More than half of these air strikes in Yemen were reported in populated areas (35 out of 63, or 56 per cent of recorded incidents), including the capital city Sana’a.

**SHOCKWAVES ACROSS SANA’A**

The incident that resulted in the largest recorded number of civilian deaths and injuries from aerial explosive weapons took place in Sana’a on 20 April 2015. An air strike at approximately 10.30 am in the morning hit an alleged mountainside missile depot in the western district of Faj Attan. Residents described the blast as like an earthquake.

AOAV recorded a total of 25 civilian deaths and 398 injuries in the Faj Attan bombing. Although the air strike was reportedly directed at a military target the force and fallout of the explosion was felt across many populated areas of the capital.

Residential homes near the site were flattened. The shockwaves were felt up to four miles away, and local Red Cross workers reported that civilian casualties were spread throughout the city as windows were shattered and debris was scattered across Sana’a. Resident Osamah al-Fakhkhi, recalling the aftermath, said:

“They were explosions that were heard and felt far away from the site. The injuries caused by the explosives were so severe that they left the victims with almost no hope of recovery.”

According to the damage assessment carried out by the United Nations Institute for Training and Research (UNITAR), by 15 May 2015, 440 structures had been affected by armed violence in the capital city, with 74 buildings completely destroyed.
STATE OF CRISIS: EXPLOSIVE WEAPONS IN YEMEN

DAMAGE ASSESSMENT OF SANA‘A CITY, SANA‘A GOVERNORATE, YEMEN

Analysis with WorldView-2 Data Acquired 19 May 2015 and WorldView-3 Data Acquired 12 & 31 December 2014

This map illustrates satellite-detected damage and destruction in the city of Sana‘a, Yemen. Using WorldView-2 imagery acquired 19 May 2015, 12 and 31 December 2014, UNITAR/UNOSAT identified a total of 416 affected structures. Approximately 74 of these structures were destroyed, 108 severely damaged, and 234 moderately damaged. Additionally, 28 impact craters were found. A total of four medical facilities were identified within 100 meters of damaged and destroyed buildings, and it is possible that these facilities also sustained some damage. This is a preliminary analysis and has not yet been validated in the field. Please send ground feedback to UNITAR/UNOSAT.

Legend:
- Destroyed Structure
- Severely Damaged Structure
- Moderately Damaged Structure
- Impact Crater
- Possibly Damaged Medical Facility

Map Scale for A3: 1:35,000

Coordinate System: WGS 1984 UTM Zone 38N

Source: UNITAR/UNOSAT

Production: UNITAR/UNOSAT

Analysis conducted with ArcGIS v10.3

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BOMBING HITS MARKETPLACES

On several occasions civilians shopping in marketplaces in Yemen have been killed and injured by the use of explosive weapons. AOAV has recorded four air strikes that hit marketplaces in Yemen between 1 January and 31 July 2015.

On 6 July, coalition aircraft dropped two munitions on a crowded livestock market in Fayoush, in Lahj governorate of southern Yemen.

Many of the victims were blown apart in the blast and have remained unidentifiable and unclaimed.

According to investigators with Amnesty International, craters at the site measuring three metres deep and four metres in diameter indicated that a heavy aircraft bomb, weighing between 500 and 1,000 pounds, had exploded in the market. 28

In all, at least 41 people were killed and another 23 injured in the attack. People had come to Fayoush market from surrounding areas to buy and sell goats, sheep and cows as a result of severe food shortages in the region.

Adam Hassan Omar, 52-year-old father of 11, told Amnesty: “I went to the market to see if I could sell three goats for a better price than I bought them. I used to work as a daily labourer mostly in construction in Crater (Aden), but since the war I have not gone there. It’s difficult to get there now and there is no work there anyway.

I try to earn a little money buying and selling goats and sheep. I heard a plane above but did not worry; I did not think they would bomb a market. The plane was going around above for quite a while. Then the explosion happened. I remember feeling as if a strong wind pushed me, transported me and a strong pain as if I had been cut in half. Then I fainted and woke up here [in the hospital]. I don’t know who brought me here. 29

Fragments of the bomb had torn through Adam’s abdomen, causing damage to his internal organs. Doctors who treated him said they had to remove some 15cm of his intestine and spleen. 30

Two days earlier, on 4 July, two air strikes hit a busy market in Beni Hassan in Hajjah province, in an area known as the Aahem triangle. The first explosion hit a cooking-gas station at about 8.30 pm. The second, half an hour later, fell in the heart of a crowded market as well as two neighbouring restaurants and a hotel. 31

Staff from Médecins Sans Frontières (MSF) arrived at scene an hour later, and helped to move the wounded to three separate hospitals nearby for emergency treatment. Medical staff were overwhelmed by the scale and severity of the injuries. “It has been terrible. We could never have imagined that we could receive so many severely injured people at one time in a small health center like Beni Hassan. The whole [MSF] team is shocked by what they have seen, especially since it happened to people enjoying an evening in Ramadan,” said Dr Ammar, part of the MSF team in Hajjah. 32
GROUND-LAUNCHED EXPLOSIVE WEAPONS

Ground-launched explosive weapons cover a wide range of ordnance, but in Yemen this term mostly refers to indirect-fire systems such as rockets and mortars (weapons that can be launched without the operator being able to see the target). These weapons were responsible for 23 per cent of recorded civilian deaths and injuries from explosive violence in Yemen.

AOAV recorded 1,037 civilian deaths and injuries from the use of artillery shells, mortars and rockets in Yemen between 1 January and 31 July 2015. In total, 1,104 deaths and injuries were recorded meaning that civilians made up 94 per cent of recorded deaths and injuries from ground-launched explosive weapons. These weapons have been fired into populated areas in Yemen by both state-affiliated and non-state forces. The majority of incidents (67 per cent) have been reportedly carried out by Houthi forces and allied fighters.

Deaths and injuries were reported in 33 separate incidents of ground-launched explosive violence recorded in Yemen before 31 July 2015. Three-quarters of ground-launched incidents took place in populated areas, mostly in the southern cities of Aden and Taizz.

MUTIPLE ROCKET LAUNCHERS IN ADEN

Civilians in the port city of Aden have been repeatedly hit by imprecise rockets fired from multiple launchers. These battlefield weapons are commonly reported as ‘Katyusha’ rockets. Similar to the notorious ‘Grad’ rocket, these weapon systems can fire a large number of munitions in a short period of time.

Overnight on 1 July between 15 and 20 rockets were fired into Aden, where they fell over a wide area. The barrage hit two densely-populated neighbourhoods known as Block 4 and 5. Overall at least 18 civilians were killed, according to health officials in Aden.

Al Thawra hospital, Sana’a: Hussein, 5 years old, was hit by a missile while on the balcony of his family home. He spent four days in a coma after suffering serious head injuries. (OCHA/Charlotte Cans, 15 June 2015)
Hospitals in the town were overwhelmed by the injuries.36

The first rocket fell near Mansoura central prison between two checkpoints. One reported fighter was killed and several injured.37

As people emerged onto the main road to assist the victims, a second rocket landed in the street, hitting a gas station. Among the casualties from this second rocket was 17-year-old student Ayman Abdallah. Ayman suffered shrapnel wounds across his body, and died on 4 July after three days in hospital.38

The third rocket landed shortly after the first two. It hit the roof of the nearby Infinity Hotel, which at that time was home to hundreds of people already displaced by explosive violence elsewhere in the country.39

An hour later, the fourth rocket hit the fourth floor of the Royal Concorde Hotel nearby. Six members of the Ali family were injured, including 25-year-old Amal and her infant son Hafedh.40

Witnesses described the strike on the Royal Concorde: “Women and children were screaming, running out of their apartments without even wearing abayas or taking their bags. The fourth floor was filled with smoke. The family living in [room] 411 had come to Mansoura to seek safety. Now the wife and child are in critical condition in the hospital.”41

Amal told researchers from Amnesty International: “We heard two rockets strike nearby and we ran to the stairs, because the stairs are in the centre of the building, away from the outer walls. After a while we went back to the room as it was quiet. But then the rocket hit the building. Most of the shrapnel hit me and Hafedh [18-month-old son], who was on my lap. Shrapnel penetrated his head and went through to his left eye, causing internal damage. He lost his eye and is in a coma. My baby Bara’, who is only three months old, my husband, my mother, and her mother-in-law were also all injured by shrapnel but luckily less seriously.” Amal herself suffered multiple injuries from rocket fragments in her face, chest, arm and leg.42

Several more rockets hit the same area a few hours later. At roughly 5.30 am, a rocket struck a two-storey home 40m from the Infinity Hotel. The al-Junaidi family lived in an apartment on the second floor. Qaseem Mohammed, an infant, was killed as he slept, and Mohammed, the baby’s father, was severely wounded.43

Omar Saleh Omar, 54, a bus diver living on first floor told investigators from Human Rights Watch: “It was awful, that day was awful. I will never forget how she [surviving mother] screamed and cried. Now she doesn’t speak at all. She has been in shock since that day.”44

“I am now quadriplegic, paralysed from the neck down. That night, shrapnel entered my neck and exited through my seventh vertebrae. We had just moved to our new house, we thought we were safe. Who will take care of my family now? I was already taking care of my 58-year-old brother Khaled, who is intellectually disabled and my 27-year-old son Ahmed who is dumb and mute. Meanwhile my 28-year-old daughter Walla’ is sixty per cent deaf.”

Anhar Najeeb, 55 year-old mother-of-two, injured in overnight rocket attacks in Aden on 1 July.45
PROJECTILES KILL AND INJURE DISPLACED FAMILIES
The humanitarian crisis in Yemen has meant that there are currently more than 1.4 million internally displaced persons (IDPs) in the country.46

On multiple occasions in Yemen this year, rockets and mortars have hit facilities home to people seeking shelter and refuge from explosive violence.

On 6 May, at least 32 civilians were killed and another 67 injured by explosive weapons as they tried to flee fighting in Aden.

Residents and witnesses reported that a series of mortar rounds fell seemingly at random as hundreds of people were gathering at an IDP camp in a small fishing harbour. Residents had been trying to board barges to escape over sea when the shells fell. Many of the casualties were reportedly women and children.47

Late in the night of 4 July, a rocket struck the front of the Al Tadamon Kindergarten in Aden. Twelve refugees living inside were killed, including five children. The Kindergarten had been home for two months to 94 IDPs, including ten families.48

“I still remember the day when the rocket shelling was heavy. My mother woke us up, pushed us through the door and told us to run, run, run. We found ourselves here, in this school. I want to go back home. I want to be safe.”
12-year-old Al-Omari who lives in a school used to house IDPs in the southern city of Aden.49
IEDs are essentially homemade bombs, mostly used by non-state armed actors.

Yemen has suffered several highly destructive attacks using improvised explosive devices (IEDS), often claimed by ISIL or AQAP militants. AOAV recorded 20 separate IED attacks in Yemen during the first seven months of 2015. These attacks were responsible for 17 per cent of civilian deaths and injuries in Yemen in 2015. IEDs have killed and injured 848 people, 774 of whom were civilians (91 per cent).

Three-quarters of all IED attacks in Yemen until 31 July 2015 have taken place in populated areas. When IEDs have exploded in populated areas, 97 per cent of casualties were civilians, compared to just 10 per cent in other areas.

**ATTACKS ON SANA’A MOSQUES**

The largest number of civilian casualties from a single explosive weapon attack in Yemen in the first seven months of 2015 came on 20 March in a sequence of seemingly-coordinated suicide bombings in the capital city Sana’a. At least 137 people were killed and another 345 injured in the explosions. At least 13 children were among the dead.  

Four suicide bombers attacked the Badr and al-Hashoosh mosques as predominantly Shia worshippers began their Friday noon prayers. At the Badr mosque, in the south of Sana’a, one man entered the building and detonated his explosives among the crowd. As people ran to the exits, the second explosion happened near the main gates.  

Two bombers also detonated explosives inside the al-Hashoosh mosque in the north of Sana’a. Mohammed al-Ansi, who survived the attack at al-Hashoosh, said he was thrown about six feet by the power of the blasts.

The devastating bombings severely impacted hospitals in Sana’a, which struggled to respond to the flood of casualties and were forced to appeal for blood donations from members of the public.

The attacks were claimed by ISIL, the first attacks in Yemen to be claimed by the group. A statement attributed to the group claimed that the attack was carried out against Shia supporters of the Houthi group. Since then AOAV has recorded 12 IED attacks for which ISIL has claimed responsibility in the country.  

**Jamaa Mansour, 50 years old, Displaced from Saada, living in a school hosting some 200 displaced persons in Sana’a.**

(OCHA/Charlotte Cans, 16 June 2015)
CONCLUSION

"The humanitarian situation is nothing short of catastrophic. Every family in Yemen has been affected by this conflict. The people are facing immense hardship. And it is getting worse by the day [...] This cannot go on. Yemen is crumbling." 
Peter Maurer, ICRC President, August 2015

Yemen has been torn apart by the use of explosive weapons in populated areas across the country in 2015. Explosive weapons have not only led directly to the deaths and injuries of thousands of civilians, but they have helped drag the country into crisis.

The use of explosive weapons with wide-area effects in populated areas is having a devastating impact on civilians in Yemen.

Hundreds of homes and civilian buildings have been destroyed or severely damaged. Hospitals, schools and life-saving humanitarian assistance have been hindered, blocked or closed down. Huge swathes of the civilian population have been driven from their homes, fuelling a displacement crisis in which more than 1.4 million people are currently displaced within Yemen.

The widespread bombing of towns and cities in Yemen will likely result in extensive contamination from explosive remnants of war (ERW), putting civilians at risk for years, perhaps even decades, to come.

Yemen is not the only country to fall victim to this pattern of violence in recent years. From Afghanistan to Iraq, Libya to the occupied Palestinian territory, Syria to Ukraine, the use of explosive weapons in populated areas is a major cause of civilian suffering. This predictable and preventable pattern of harm is unacceptable.

RECOMMENDATIONS

AOAV and OCHA urge all parties to conflict – national armed forces and non-state armed groups – to heed the United Nation Secretary-General’s call to avoid the use of explosive weapons with wide-area effects in populated areas.

AOAV and OCHA urge states to:

- Endorse the United Nations Secretary-General’s recommendations that States, as well as other actors, should avoid the use of explosive weapons with wide-area effects in populated areas;56

- Work together with international organisations and civil society to develop a political commitment to refrain from using explosive weapons with wide-area effects in populated areas;57

- Share existing national practices and policies relating to the use of explosive weapons in populated areas, including through their representatives to the UN in response to the UN Secretary General’s Note Verbale of 1 October 2014;58

- Collect and make available to the UN and other relevant actors information on civilian harm resulting from the use of explosive weapons including gender, age and disability disaggregated data, to better understand the impacts of such use;

- Recognize the rights of victims and survivors and ensure that assistance is gender and age sensitive.
METHODOLOGY

This paper draws on data collected by AOAV and also by the United Nations Office of the High Commissioner for Human Rights (OHCHR). The OHCHR and AOAV figures measure different things using different methodologies. OHCHR seeks to record all civilian deaths and injuries from the conflict, including but not limited to deaths and injuries from explosive weapons, whereas AOAV measures only deaths and injuries from explosive weapons that are reported in English-language media sources. The narrow focus and methodology of AOAV’s explosive violence monitor mean that its civilian death and injury figures are significantly lower than the overall figures published by OHCHR.

UN OHCHR

Figures attributed to OHCHR were provided by the OHCHR Yemen County Office. OHCHR has a team of trained human rights officers and field monitors located in almost all the conflict affected areas in Yemen. It gathers information on violations of human rights and international humanitarian law from medical and police reports, and by interviewing victims and their families, eyewitnesses and government officials.59

AOAV

AOAV uses an incident-based methodology adapted from the Robin Coupland and Nathan Taback model.60 Data on explosive violence incidents is gathered from English-language media reports on the following factors: the date, time, and location of the incident; the number and circumstances of people killed and injured; the weapon type; the reported user and target; the detonation method and whether displacement or damage to the location was reported. AOAV does not attempt to comprehensively capture all incidents of explosive violence around the world but to serve as a useful indicator of the scale and pattern of harm. No claims are made that this data captures every incident, death or injury of explosive violence in Yemen between 1 January and 31 July 2015.

LIMITATIONS

AOAV’s methodology is dependent on the detail level provided by its source material, and lacks any mechanism to follow up reports with on-the-ground investigation. It is recognised that there are very different levels of reporting according to access conditions on the ground so that under-reporting is likely in some contexts. In addition, only English-language media reports are used, which does not provide a comprehensive picture of definitive explosive weapon use.

The methodology is designed to capture distinct incidents of explosive violence with a clear date and location. In some contexts of explosive violence, particularly during intense armed conflict, casualties cannot be assigned to specific incidents but a total number is reported as the result of a period of days. These casualties cannot be included in the dataset. As the methodology relies on reports which are filed shortly after an incident took place, there is no mechanism for assessing whether people reported as wounded in the immediate aftermath of an incident subsequently died from their injuries. This is another factor that should be assessed when considering the likelihood that the actual numbers of fatalities of explosive violence are higher than the numbers recorded by AOAV. There is no systematic baseline for determining what constitutes an injury, and AOAV is therefore subject to the assessment of the news source.

AOAV is focused on capturing the harm caused by explosive weapons at the time of use. Explosive weapons that fail to explode as intended can linger in the form of explosive remnants of war (ERW) for years, if not decades, to come. This dataset does not include deaths or injuries caused by landmines or explosive remnants of war (ERW).
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Notes

4. Figures provided by the United Nations OHCHR Yemen Country Office. The OHCHR Yemen Country Office has a team of trained human rights officers and field monitors located in almost all the conflict-affected areas in Yemen. The monitoring team gathers information on violations of International Human Rights and International Humanitarian Law, with a special focus on the targeting of civilians and civilians infrastructure perpetrated by the warring parties. The OHCHR Monitoring Team gathers information on human rights violations through interviewing victims and their families, eyewitnesses, government officials, and medical and police reports. For more information see Methodology.
10. For the full list of Member States who have spoken out on this issue, see International Network on Explosive Weapons (INEW), “Acknowledging the Harm,” www.inew.org/acknowledgements (last accessed 28 August 2015).
12. AOAV defines an explosive violence incident as any use of explosive weapons in armed conflict to cause at least one death or injury at the time of use, and which took place within a given 24-hour period, with a specified geographical location.
13. AOAV recorded 4,486 civilian deaths and injuries in Yemen between January and July 2015. The next most affected countries in this time period were Syria (4,205 civilian deaths and injuries), Iraq (3,327), and Nigeria (1,440).
14. A death or injury from explosive violence was recorded in every governorate except for Al-Mahwit, Al-Maharah and Socotra. The administrative district of Amnat al-Assimah has been included as part of Sana’a’s governorate for the purposes of data collection. See map for further details.
16. This includes the use of cluster munitions, weapons which were banned by the international community in 2008 under the Convention on Cluster Munitions. The use of aerial cluster munitions in Yemen has been reported by Human Rights Watch after the ground on investigations. Ground-launched cluster munitions have also been documented, but it is not known who was responsible. For more information see: “Yemen: Cluster Munitions Harm Civilians,” 31 May 2015, https://www.hrw.org/news/2015/05/31/yemen-cluster-munitions-harm-civilians; and “Yemen: Cluster Munition Rockets Kill, Injure Dozens,” 26 August 2015, https://www.hrw.org/news/2015/08/26/yemen-cluster-munition-rockets-kill-injure-dozens (last accessed on 28 August 2015).
17. In addition, AOAV recorded a further eight air strikes in Yemen during this time period, seven carried out reportedly by US drone strikes, and one from unknown forces. No civilian casualties were recorded in these eight incidents.


58 UN Secretary General’s note verbale, ref. OCHA/11/8/2014

59 For more information see http://www2.ohchr.org/english/ 40 For more information see www.insecurityinsight.org.
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