

WAITING FOR NO ONE:

Civilian Survival Strategies in Syria



CENTER FOR
CIVILIANS IN CONFLICT
RECOGNIZE. PREVENT. PROTECT. AMEND.

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Civilian Survival Strategies
in Syria**

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Printed in the United States of America.

Cover photo: Image by Khalil Ashawi
(2015)

Caption: Ali Badran, a fourteen-year-old, monitors warplanes in southern Idlib with his father, who stands beside him. They are reporting all air traffic in real time and the places that are the intended targets.

Website address: www.civiliansinconflict.org

Organizational Mission and Vision

Center for Civilians in Conflict (CIVIC) works to improve protection for civilians caught in conflicts around the world. We call on and advise international organizations, governments, militaries, and armed non-state actors to adopt and implement policies to prevent civilian harm. When civilians are harmed we advocate the provision of amends and post-harm assistance. We bring the voices of civilians themselves to those making decisions affecting their lives.

CIVIC's vision is for a future where parties involved in conflict go above and beyond their legal obligations to minimize harm to civilians in conflict. To accomplish this, we assess the causes of civilian harm in particular conflicts, craft creative solutions to address that harm, and engage with civilians, governments, militaries, and international and regional institutions to implement these solutions

We measure our success in the short term by the adoption of new policies and practices that lead to the improved wellbeing of civilians caught in a conflict. In the long term, our goal is to create a new global mindset around robust civilian protection and harm response.

Acknowledgements

This report was researched and written by Natasha Hall, Program Officer for MENA at the Center for Civilians in Conflict. It was edited by Sahr Muhammedally, Senior Program Manager for MENA and South Asia. The report was reviewed by Marla Keenan, Program Director, and Federico Borello, Executive Director.

We would like to thank Dost Ibrahim and Mahmoud Bitar for facilitating our interviews. We would also like to thank the Norwegian Refugee Council, People Demand Change, Orient, Global Communities, and Support to Life for arranging some of our interviews in difficult conditions. Mayday Rescue and Syrian Civil Defense also provided extensive information on their programs. In addition, this report greatly benefitted from the insights of Hossam Abo Zahr, Khaled Almilaji, Casey Barrs, Luke Irving, John Jaeger, James Le Mesurier, Benjamin Smith, Erin Weir, and Daher Zedan.

Above all, CIVIC would like to thank all of the Syrians who courageously shared their stories and survival strategies in the face of impossible odds.

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Glossary

The BMJ	British Medical Journal
CIMRO	Canadian International Medical Relief Organization
EOD	Explosive Ordnance Disposal
ERW	Explosive Remnants of War (includes exploded and unexploded ordnance)
FSA	Free Syrian Army
HI	Handicap International
IED	Improvised Explosive Device
INGO	International Non Governmental Organization
IS/ISIS	Islamic State/Islamic State of Iraq and Sham (Levant)
ISW	Institute for the Study of War
NGO	Non Governmental Organization
OCHA	Office for the Coordination of Humanitarian Affairs
SAMS	Syrian American Medical Society
SCD	Syrian Civil Defense also known as the “White Helmets”
SME	Subject Matter Experts
UNMAS	United Nations Mine Action Service
UOSSM	Union of Medical Care & Relief Organizations
UN	United Nations
UXO	Unexploded Ordnance



*Image by the Syrian Civil Defense
A boy pulled from the rubble after a barrel bomb attack in Aleppo, Syria (2014).*

EXECUTIVE SUMMARY

“No one cares about us. The shells and bombs fall on us from all sides. I am scared of all armed groups but I am mostly scared of the regime’s retaliation. I walked six hours to get here [Kilis] with my child crying the whole way.”¹ - Seventeen-year-old Mariam in Kilis, Turkey.

Since the beginning of the conflict, over a quarter million Syrians have lost their lives, well over a million have been injured, and more than half of the prewar population has been displaced (in many cases more than one time).² Until the recent cessation of hostilities announced on February 27, 2016, civilians in many parts of Syria endured daily attacks involving airstrikes, barrel bombs, cluster munitions, mortars, and artillery.³ Health facilities, schools, bakeries, marketplaces, shelters, and densely populated neighborhoods were repeatedly attacked since the conflict began in 2011.⁴ At the same time, humanitarian assistance inside Syria virtually vanished due to fighting, aerial attacks, kidnapping, and restrictions on the flow of aid.

All parties to the conflict—national and international—are responsible for harming civilians. While the Islamic State group (ISIS) has committed horrendous war crimes against civilians both in Iraq and Syria, the Syrian government and its allies have harmed the majority of civilians. In 2015, the Syrian government and its allies killed nearly nine times as many civilians as ISIS, according to the Syrian Network for Human Rights (SNHR).⁵ In December 2015 alone, Syrian regime and Russian air strikes were responsible for two-thirds of all civilian deaths.⁶ The medical journal, *The BMJ*, asserted that air bombardments, including barrel bombs, missiles, and other explosive weapons, were the leading cause of death for children, signifying their inherently indiscriminate nature.⁷ Scores more have died to due the collapse of medical care from attacks on health facilities and personnel.⁸

1 CIVIC interview with Mariam, Kilis, Turkey, September 22, 2015.

2 Syrian Observatory for Human Rights, *Death Toll in Syria Tops 55,000 in 2015*, January 1, 2016.

3 The “cessation of hostilities” agreement includes the Assad regime, most of Syrian opposition groups, but excludes ISIS and the Nusra Front.

4 Amnesty International, *Syria: Government Bombs Rain On Civilians*, March 14, 2013.

5 “A Comparison between the Death Casualties who were Killed by the Syrian Regime and ISIL during 2015,” Syrian Network for Human Rights (blog), January 2, 2016, <http://sn4hr.org/blog/2016/01/02/16116/>.

6 Mouaffaq Nyrabia, “Syria: Only Civilian Protection and Accountability Will Make a Political Solution Viable,” *New Europe*, January 5, 2016, <http://neurope.eu/article/syria-only-civilian-protection-and-accountability-will-make-a-political-solution-viable/>.

7 “Civilian Deaths from Weapons Used in the Syrian Conflict,” *The BMJ*, September 29, 2015, <http://www.bmj.com/content/351/bmj.h4736#>.

8 Ian Black, “Report on Syrian Conflict Finds 11.5% Injured or Dead,” *The Guardian*, February 11, 2016.

In this report, CIVIC focuses on survival strategies in opposition-held areas, where civilians had been subjected to near constant bombardment. Despite the mounting civilian casualties over the years, the international community has struggled to develop a coherent and effective strategy to protect civilians from attacks, which only increased when Russia started its own bombing campaign in support of the Syrian government in September 2015.

While the February 2016 internationally-brokered cessation of hostilities in Syria has led to a decrease in violence in some parts of the country, civilians remain uncertain about their safety and aid agencies' access to civilian populations continues to be stymied primarily by the Syrian regime. Opposition to the Assad regime continues. Days after the call for the cessation of hostilities, hundreds went back to the streets to protest the regime. It remains to be seen how the regime will react as it has vowed to retake "every inch" of Syrian territory and reiterated that negotiations will not address the "red line" of Assad's presidency.⁹ What is certain, is that civilians have been disproportionately affected in this conflict through bombardment, arrest, and forced displacement. Extremists on each side of the conflict tend to gain the most from this insecurity

CIVIC is hopeful that current diplomatic efforts will lead to a lasting peace. Only an end to the conflict will be effective in protecting civilians and truly alleviating the physical and psychological toll. The cessation of hostilities has reduced the civilian death toll significantly, making March 2016 the month with the fewest recorded civilian deaths since July 2011.¹⁰ However, there were still numerous reported violations and, in the hours leading up to the announcement, Russia intensified its air campaign.¹¹

If we had anything at all it would be better. Any warning or shelter! We did not have anything so everyone left. Even the sheep left.

Absent a peace agreement accepted and enforced by all stakeholders, the international community must use this time to support and strengthen all viable ways that Syrians have adopted to protect themselves.

In late 2015 and early 2016, CIVIC conducted research into current self-protection strategies, interviewing civilians in Turkey, Lebanon and Syria, local and international NGOs, UN agencies, journalists, activists, educators, members of the medical profession, and others. Our research revealed the emergence of a highly localized system of survival strategies. Areas that need urgent support to be more effective include: the

development of early warning systems, better protection of civilian infrastructure including educational and medical facilities, local rescue and aid teams, efforts to mark and dispose of unexploded ordnance (UXO), and the creation of a secure platform to share protection strategies.

First, when planes and missiles approach a populated area, civilians need time to seek shelter and protection. Civilians in some villages have purchased expensive walkie-talkies to receive warnings or intercept Syrian or Russian military communiqués on impending airstrikes. Spotter networks broadcast warnings of military attacks via walkie-talkies, Facebook groups, phone applications, and now some local radio stations. However, these communications typically provide mere seconds to a few minutes advance notice of an attack. With little time to respond, the most common reaction is to take cover on a ground floor or retreat behind any nearby object.

9 Syrian Foreign Minister, Walid al Muallem, press conference, March 12, 2016, www.youtube.com/watch?v=uwFmmbW3Et8.

10 "Syria Lull Brings Deaths Down But Little Else," *IRIN News*, March 29, 2016, <https://www.irinnews.org/analysis/2016/03/29/syria-lull-brings-deaths-down-little-else>.

11 Syria Campaign's Ceasefire Monitor, <http://www.syriaceasefiremonitor.org/>, accessed March 1, 2016.

Experts suggest that a reliable early warning system for civilians and first responders could provide potentially life saving extra minutes and provide peace of mind for civilians when there is no warning. An accurate broadcast system is especially important as hostilities decrease since many civilians will not be on guard in the way they were when there were multiple attacks per day. Such a system, which would require careful planning and at least some personnel and sustained financial support, does not yet exist. An elderly man recently displaced from Tel Abyad in northern Syria, said, “If we had anything at all it would be better. Any warning or shelter! We did not have anything so everyone left. Even the sheep left.”¹²

Second, the sites that should enjoy protection under international humanitarian law—schools and hospitals—have instead become some of the most dangerous places for civilians.

Schools have been under attack, forcing communities to move educational facilities underground.¹³ One education initiative built air-raid shelters directly in or near all but two of the schools under the organization’s supervision.¹⁴

As of November 2015, the Syrian government was responsible for 90 percent of attacks on health facilities since the conflict started according to Physicians for Human Rights.¹⁵ In Aleppo, more than two-thirds of the hospitals no longer function, and about 95 percent of the doctors have fled, been detained, or killed.¹⁶ In response, Syrian medical workers and aid groups proliferated smaller field hospitals and medical points around the country to disperse the danger and make up for the loss of hospitals.

More resources are needed to build, reinforce, and renovate underground schools, hospitals, and clinics to provide additional protection against attacks and military operations. This effort should be accompanied by support to develop additional smaller and more widespread medical points for victims of shelling and aerial bombardment and clinics to receive people with non-war related medical issues. Education and health care cannot wait for peace to come and medical professionals that have left need to be enticed to return to Syria.

Third, given the shrinking humanitarian space, local aid and rescue teams are playing a vital role in saving civilian lives. Skills developed by these teams—rescue and emergency medical services, fire fighting, rubble removal, and other simple electrical and mechanical repairs that drastically improve living conditions for civilians—will be essential throughout the conflict and the reconstruction of the country. Thus far, Syrian Civil Defense (SCD) or the “White Helmets” have emerged as the most trusted and recognized local entity for providing these types of services. They also provide risk awareness sessions and distribute safety manuals on unexploded ordnance and other dangers.¹⁷ These local teams need additional training and material support to increase their capacity.

Fourth, the dangers from unexploded ordnance (UXO) are enormous due to the Syrian government’s and the Russian military’s extensive use of cluster munitions. Over 70 percent of civilians interviewed by CIVIC considered UXO to be a major concern and half knew of someone who had been killed or critically injured by UXO.¹⁸ While a large-scale effort may need to wait until the end of the conflict, Syrians are searching for ways to address the problem now. SCD teams are now being trained in non-explosive UXO disposal methods. International NGOs and governments need to fully support these efforts to safely dispose of and mark off UXOs for the safety of civilians today and those who return in the future.

12 CIVIC civilian interview, Ahmed, Akcakale, Turkey, November 15, 2015.

13 Human Rights Watch, *Safe No More: Students and Schools Under Attack in Syria*, June 5, 2013.

14 Orion Wilcox, “Day after call for international condemnation, regime targets school in Douma,” *Syria: Direct*, December 13, 2015.

15 Baker, Elise and Heisler, Michele, *Aleppo Abandoned: A Case Study on Health Care in Syria*, Physicians for Human Rights, November 2015.

16 Ibid.

17 Civil Defense programs and leaflets and interviews with operations and management staff as well as CIVIC Syrian civilian interviews in 2015 and CIVIC interviews with Luke Irving, operations officer for Mayday Rescue, September and November 2015.

18 CIVIC interviews, Turkey, September and November 2015.

Finally, Syrians have for the most part been left to fend for themselves in the five-year conflict. Gradually, civilians created their own ad hoc survival strategies, only some of which are discussed in this report. Experts in survival methods in conflict zones and civilians on-the-ground need a platform to discuss strategies that work and be able to pass on those lessons to others in a secure way and adapt to each phase of the conflict. Jason Mills, the former Head of Mission of Médecins Sans Frontières in Turkey stated in a congressional hearing on March 31, 2016, “In the case of Syria, you need to be adaptable to the conditions on the ground. You need to constantly change cross border and access points. Sometimes you put supplies in a basement or cave that only three people in the town have GPS coordinates to. It depends on the situation at the time.”¹⁹ As the frontlines shift and the battlefield changes, many of these survival strategies are applicable to wherever the threat of physical harm from airstrikes and other attacks exists.

Supporting these local efforts can save many lives, though none of them can fully protect civilians. Only a just end to the conflict can.

¹⁹ Jason Mills, “Five Years of War in Syria: Health Care Under Attack,” Hearing at the Rayburn House Office Building, hosted by the Tom Lantos Human Rights Commission, March 31, 2016.

RECOMMENDATIONS

To the Syrian Government and its Allies:

- End attacks on civilian populated areas, hospitals, homes, mosques, and schools.
- Comply with UN Security Council Resolutions 2139 and 2254 related to respect for international humanitarian and human rights law.
- Allow unhindered humanitarian access for the United Nations and its implementing partners to deliver food, aid, and medicine. Refrain from charging or delaying the travel of civilians and humanitarian NGOs through checkpoints.

To International Non-Governmental Organizations, United Nations Agencies, and donors:

Support and fund:

- Research and development of an early warning system to better protect civilians from attacks.
- Dissemination of information and education for civilians about self-protection strategies, such as early warning systems, at schools and through local NGOs.
- Placement of small, widely dispersed shelters or ditches so that civilians may be protected from secondary blast injuries.
- Fortification of existing hospitals and underground schools.
- Increased capacity of hospitals deemed to be in safer border areas as patients and medical personnel flee to these health care facilities in the absence of closer alternatives.
- Increased numbers of medical service points to address basic health issues not directly related to wartime violence. Smaller locations will reduce the conspicuousness of medical buildings and disperse the threat to medical staff and patients.
- Programs that educate, train, and certify civilians in basic emergency medical assistance and preventative health care.
- Mainstreaming physical protection of civilians and civilian infrastructure by including experts with a background in providing these safeguards in conflict zones (e.g., evacuation plans, blast walls, shelters, the fortification of buildings, etc.) in every UN-led humanitarian cluster and incorporating Syrians' existing strategies into future efforts.
- Local aid and rescue teams capable of rescuing civilians in the aftermath of an attack, fire fighting, rubble removal, and simple electrical and plumbing services for affected populations.
- Training, equipping, and deployment of Syrian Explosive Ordnance Disposal (EOD) teams on non-explosive disposal methods.
- Risk education through trusted local NGOs about UXO to raise awareness about these types of weapons and mark off uncleared areas.
- Creation of a secure online platform across governorates in Syria so that civilians, local NGOs, and experts can better share information on strategies that work to prevent and minimize civilian harm.

To the Governments of Turkey, Lebanon, and Jordan:

- Allow for the free and safe movement of civilians fleeing danger in their home country to neighboring host countries, while implementing security measures to stem the flow of those who are threats to security.
- Allow displaced persons to practice their professions in refugee host countries, especially in order to retain medical professionals in the region. Streamline a certification process through which qualified Syrian health professionals can serve their own people, to meet high demand for their medical and language skills.
- Expedite registration in host countries for NGOs working in Syria and allow them to hire Syrians.
- Allow international and Syrian NGOs to conduct trainings and capacity building workshops in host countries.
- Allow international experts to train and equip Syrians in UXO disposal in host countries.

To countries supporting the armed opposition groups with lethal assistance:

- Condition lethal assistance to armed groups on their adherence to international humanitarian law (IHL) and to not misusing or interfering in the administration of medical facilities and civilian administration.
- Train armed groups on key issues in IHL and provide practical training on how to minimize civilian casualties.

To the International Anti-ISIS Coalition:

- Ensure that the anti-ISIS coalition adheres to international humanitarian law in its operations and has processes to minimize, investigate, and acknowledge civilian harm.

To Armed Opposition Groups:

- Avoid the occupation of and interference in the work of hospitals, courts, internally displaced persons (IDP) camps, Local Councils, Syrian Civil Defense, schools, and shelters.
- Move operations rooms, headquarters, and ammunition depots away from populated areas including homes, hospitals, and schools.
- Allow unhindered humanitarian access for the United Nations, the International Committee of the Red Cross (ICRC), and humanitarian INGOs and Syrian NGOs. Refrain from charging fees or delaying the travel of civilians and humanitarian NGOs through checkpoints.
- Comply with UN Security Council Resolutions 2139 and 2254 related to respect for international humanitarian and human rights law.

Methodology

Research for this report was conducted September through December 2015 in Turkey, Lebanon, and Kobane, Syria. Additional research was conducted in early 2016, adding interviews with those involved in the recent rounds of negotiations and humanitarian organizations tasked with providing aid and access to hard to reach and besieged areas.

Ninety civilians, representing every governorate of Syria, were interviewed. When possible, CIVIC conducted face-to-face semi-structured interviews or focus group discussions with individuals who fled Syria in 2015 in Turkey (Urfa, Akcakale, Kilis, Gaziantep, Reyhanli, Antakya) and Lebanon (the Beqaa valley, Beirut). In light of the increasing difficulties for foreign NGOs to enter Syria and for Syrians to leave their country, numerous interviews were conducted via phone or Skype with people still residing in country. A third of the civilians were interviewed prior to Russian airstrikes, which began at the end of September 2015.

Civilians were primarily asked about self-protection strategies from explosive weapons and artillery. While people in regime-held areas have suffered harm from shelling by armed opposition groups, many have been able to relocate from front line areas and did not express a fear of daily bombardment or develop specific strategies to protect themselves from daily indiscriminate violence. Civilians in many rebel-held areas faced daily attacks by airstrikes, surface-to-surface missiles, cluster munitions, and shelling. The civilians interviewed represent a wide range of affected populations, from the elderly to children, men and women, activists, and farmers.

CIVIC also held meetings with UN agencies, local and international humanitarian NGOs, citizen journalists, activists, medical doctors and professionals, and displaced persons camp directors. Interviews with members and commanders of 17 armed groups also informed the research and recommendations.

We use only first names in this report to protect the interviewees; in many cases these names are pseudonyms.



Image by Khalil Ashawi

Syrian Civil Defense volunteer holds a young child who was killed by Russian airstrike in southern Idlib, which reportedly killed 96 civilians and wounded 150 with four fuel-air explosive laden rockets ("vacuum bombs") (2015).

INTRODUCTION

“Please stop the planes.”

“Please stop the missiles.”

“Please stop the barrels.”

Civilians fleeing Syria repeatedly made those requests in interviews with CIVIC. Human rights organizations have been documenting attacks on civilians since the start of the conflict.²⁰ As Widney Brown, Director of Programs at Physicians for Human Rights (PHR) noted at a March 2016 hearing with the Tom Lantos Human Rights Commission,

The strategy of besieging towns, bombing schools and marketplaces, the attacks on the health care infrastructure and the targeting of medical workers is aimed at making life unlivable – even unsurvivable for civilians. This undermines the key goal of international humanitarian law, which is to make conflict a little less hellish for civilians. But in Syria...we see the targeting of civilians and civilian objects as an end in itself.²¹

The Syrian Center for Policy Research reports that 11.5% of the population has been killed or injured.²² Over half the population has been displaced. According to February 2016 figures of the UN Office for the Coordination of Humanitarian Affairs (OCHA), there are over 4.7 million registered refugees and over 6.6 million who are internally displaced, making it one of the worst displacement crises since World War II.²³

20 Amnesty International, Syria: Government Bombs Rain on Civilians, March 14, 2013, <https://www.amnesty.org/en/documents/MDE24/009/2013/en/>, and see also Amnesty International “Civilian Objects Were Undamaged” Russia’s Statement on its Attacks in Syria Unmasked, (MDE 24/3113/2015), December 2015, https://www.amnesty.ch/de/laender/europa-zentralasien/russland/dok/2015/russland-leugnet-zivile-opfer-seiner-luftangriffe/2015-12-23_report_russia_syria_civilian_objects_were_not_damaged_en.pdf.

21 Widney Brown, “Five Years of War in Syria: Health Care Under Attack,” Hearing at the Rayburn House Office Building, hosted by the Tom Lantos Human Rights Commission, March 31, 2016.

22 Ian Black, “Report on Syrian Conflict Finds 11.5% Injured or Dead,” *The Guardian*, February 11, 2016, <http://www.theguardian.com/world/2016/feb/11/report-on-syria-conflict-finds-115-of-population-killed-or-injured>.

23 UN Office for the Coordination of Humanitarian Affairs, *Syrian Arab Republic: Overview*, February 2016, <http://www.unocha.org/syria>.

Prior to the cessation of hostilities declared on February 27, 2016, opposition-held and contested territory had been particularly hard hit due to Syrian regime and Russian military airstrikes and long-range missiles. According to a May 2015 Handicap International report, explosive weapons represent the greatest threat to civilians in Syria accounting for about 84 percent of recorded incidents, 75 percent of which occurred in densely populated areas.²⁴ In July 2015 alone, the Syrian government conducted 6,673 airstrikes including 3,654 barrel bomb attacks, according to the Syrian Observatory for Human Rights (SOHR), killing 791 civilians and injuring 3,000.²⁵

Fifteen-year-old Reem described her first encounter with a barrel bomb in 2015:

*We have a farm in the southern Aleppo countryside. We did not feel the war very much at all where we were. We did not really know what a barrel bomb was. After the barrel dropped, my family immediately threw me in the car to take me to Turkey. I blacked out and I do not remember anything. I woke up without a leg and they [doctors] said I will probably lose the other one as well.*²⁶

CIVIC also interviewed those from ISIS-held areas or territory still under firm control of the Assad government and pro-regime forces. In ISIS-controlled areas, people live under daily threat of lashing, imprisonment, or public execution. School and health-care systems are nearly non-existent. Mohamed from Tel Rifaat told CIVIC, “Da’esh killed humanity and religion.”²⁷

Da’esh killed humanity and religion.

The US-led anti-ISIS coalition has also caused civilian harm. Airwars, a not-for-profit transparency project which tracks the international air war against Islamic State and other groups in Iraq and Syria, states that more than 400 civilians have been killed in coalition airstrikes on Syria since 2014.²⁸ The US Department of Defense, to date, has admitted to killing 13 and injuring nine civilians in Syria over the same period.²⁹

For the anti-ISIS coalition, it is critical that all feasible precautions be taken to avoid civilian harm especially since ISIS is embedded in civilian areas. Coalition-caused civilian harm, even if incidental, also feeds into the perception amongst some civilians of collaboration between the Syrian regime and the coalition. Tareq, who recently fled Raqqa, said, “At first, they [the anti-ISIS coalition] didn’t hit civilians but now they do. Now it almost seems like there is coordination between the [Syrian] regime and the coalition.”³⁰ The addition of Russian airstrikes, and now the Syrian regime’s focus on areas like Palmyra, will likely further support this perception since most people on the ground might not be able to tell the difference between a Russian or Syrian plane and, for example, a US plane before it strikes.

24 Handicap International, *The Use of Explosive Weapons in Syria*, May 2015, <http://www.handicap-international.org/fileadmin/Case-Study-Syria.pdf>.

25 SOHR, “Coincided with de Mistura consultation, Bashar al-Assad regime uses its air forces and carries out about 7,000 airstrike in July,” August 1, 2015, <http://www.syriaohr.com/en/?p=27483>.

26 CIVIC civilian interview in Reyhanli, Turkey, September 15, 2015.

27 CIVIC interview with Mohamed from Tel Rifaat, September in Turkey, September 22, 2015.

28 “Airwars,” <http://airwars.org/>, accessed February 3, 2016. SNHR reports that 267 civilians have been killed. See “The Killing of 267 Civilians at the hands of The International Coalition,” *Syrian Network for Human Rights* (blog), February 13, 2016, <http://sn4hr.org/blog/2016/02/13/18432/>.

29 “U.S. Central Command Releases Results of Iraq and Syria Civilian Casualty Assessments,” United States Central Command, January 22, 2016, <http://www.centcom.mil/en/news/articles/jan-22-centcom-releases-results-of-iraq-and-syria-civilian-casualty-assessm>; see also “U.S. Central Command Releases Results of Iraq and Syria Civilian Casualty Assessments,” U.S. Central Command, January 15, 2016, http://www.defense.gov/Portals/1/features/2014/0814_iraq/docs/20160115_02_CENTCOM_New_Release-Results_of_Iraq_and_Syria_Civilian_Casualty_Assessments.pdf.

30 CIVIC interview with Tareq, Gaziantep, Turkey, September 20, 2015.

In areas under firm control of the Syrian government, people are under threat of arrest, forced disappearance, and forced conscription. In 2015, those closer to the frontlines suffered under indiscriminate shelling from armed groups.³¹ But generally people found regime-held territory safer if they were not wanted by the Syrian regime.

The civilians do everything.

One woman visiting Turkey but planning to return to her home in regime-held parts of western Aleppo said, “The [Syrian] army protects us. Generally, people are safe in our area.”³² A teacher from Idlib said that his sister and parents “moved to regime-held territory because it is safer. There are no planes and rockets. Almost all the deaths are from liberated areas because the regime kills civilians.”³³ Aamer, a student, who traveled between regime- and opposition-controlled areas in Hama throughout the war said, “When I was studying in regime areas, I just learned to keep my head down and nothing will happen.”³⁴

In opposition-held and contested areas, civilians painted a different picture of daily life. Through tears, Shadia, a young mother of four from Homs governorate, explained:

*Everything is destroyed. It used to be one of the biggest cities in Syria. We don't even have ambulances. The civilians do everything. We just have one very simple hospital underground. More like a medical point. There are just four beds underground. If there is a women giving birth, they will bring her there. But if there is an airstrike or shelling, they have to take her out and bring in the injured person. Still it was very hard to leave. My family is there. I miss it so much. If the planes stopped, I would go back right away.*³⁵

Her hometown is one of many areas that are still under siege; where people cannot move in or out and have diminished access to food, clean water and medical care.³⁶ According to Siege Watch, there are still over one million people suffering from siege in Syria.³⁷

The United Nations Security Council has adopted seven Resolutions related to the Syrian government's treatment of its own people.³⁸ UN Security Council Resolutions 2254, 2139, 2118, and 2209, demanding unimpeded humanitarian access especially into besieged areas and an end to the use of chemical weapons and attacks on civilians and civilian objects, continues to be violated.³⁹ The Assad government denies the use of barrel bombs and chemical weapons despite numerous reports that suggest otherwise.⁴⁰

31 Human Rights Watch, “He Didn't Have To Die”: Indiscriminate Attacks by Opposition Groups in Syria, March 2015, https://www.hrw.org/sites/default/files/reports/syria0315_ForUpload.pdf.

32 CIVIC civilian interview, Reyhanli Turkey, Hind, November 11, 2015.

33 CIVIC civilian interview with Abdulhakim from the Idlib countryside in Antakya Turkey, November 11, 2015.

34 CIVIC civilian interview with Aamer from Hama, in Antakya, Turkey, November 13, 2015.

35 CIVIC civilian interview with Shadia in Reyhanli, Turkey, November 12, 2015.

36 Edith M. Lederer, “UN: Aid Reaches Only 30 Percent of Syrians in Besieged Area,” *ABC News*, March 30, 2016, <http://abcnews.go.com/US/wireStory/aid-reached-30-percent-syrians-besieged-areas-38030067>.

37 Siege Watch is a joint initiative of peace organization PAX and The Syria Institute. Active monitoring for the project began in late 2015. See <http://siegewatch.org/#7/35.111/38.540>, last accessed on March 29, 2016.

38 “UN Documents for Syria: Security Council Resolutions,” Security Council Report, <http://www.securitycouncilreport.org/un-documents/search.php?IncludeBlogs=10&limit=15&tag=%22Security%20Council%20Resolutions%22+AND+%22Syria%22&ctype=Syria&rtype=Security%20Council%20Resolutions&cbtype=syria>.

39 Ibid.

40 “There are no Barrel Bombs’: Assad’s Syria ‘facts,’” Channel4.com, February 10, 2015, <http://www.channel4.com/news/assad-syria-interview-bbc-barrel-bombs-facts-video>.

On September 30, 2015, the Russian Federation began airstrikes in Syria with the expressed aim of targeting ISIS. But as of October 30, 2015, according to the Carter Center, 85 percent of Russian airstrikes hit areas controlled by armed opposition groups, not ISIS.⁴¹ Both Syrian and Russian militaries focused on targeting Aleppo, Hama, Idlib, Deraa, Homs, and the Damascus countryside where there is no ISIS presence.⁴² Where there has been a Jabhat al Nusra presence, many strikes hit civilian areas lacking legitimate military targets, or targeted Free Syrian Army groups that are fighting ISIS.⁴³ According to the Institute for the Study of War (ISW), Russian airstrikes continued to target mainstream elements of the Syrian armed opposition in the first ten days of the cessation of hostilities.⁴⁴

The airstrikes killed mostly the civilians.

Rasha from Idlib points out, “The airstrikes killed mostly the civilians. The Russian missiles are clearly hitting non-ISIS areas. They are hitting Free Syrian Army-held areas, not even Jabhat al Nusra. There is no Jabhat al Nusra, Da’esh, or even Islamist-leaning groups in the places they hit.”⁴⁵ Even as Russian and Syrian military operations shifted their focus to ISIS-

held areas such as Palmyra in March 2016, there continue to be reported violations in the governorates aforementioned and aid delivery to civilians in hard to reach and besieged areas is still vulnerable to the whims of the Syrian regime.⁴⁶

The Russian Defense Ministry denies killing any civilians in Syria despite human rights organizations’ authoritative reporting that the number of civilian casualties was at least in the hundreds by the end of 2015.⁴⁷ Just three days after the adoption of Security Council Resolution 2254 in December 2015, demanding that, “all parties immediately cease any attacks against civilians and civilian objects,” Russian airstrikes against the city of Idlib hit health and public services centers and apartment buildings, killing 50 civilians and wounding 170.⁴⁸ In January 2016, Russian airstrikes killed 679 civilians—including 94 children and 73 women; more than the Assad regime or the Islamic State group, according to SNHR.⁴⁹ Even in the first month of this cessation of hostilities, more than 360 civilians have been killed. In areas where the agreement came into effect, 174 civilians, including 41 children were killed.⁵⁰

41 “Syria Conflict Update,” The Carter Center, October 30, 2015, https://www.cartercenter.org/resources/pdfs/peace/conflict_resolution/syria-conflict/Syria-Conflict-Update-103015.pdf.

42 “Russian Airstrikes Update,” The Carter Center, January 29, 2016, https://www.cartercenter.org/resources/pdfs/peace/conflict_resolution/syria-conflict/Russian-Airstrikes-Update-Jan-29-2016.pdf. The Islamic State is also known as the Islamic State of Iraq and Syria or ISIS and pejoratively known by its Arabic acronym as Da’esh. The pejorative term for the Islamic State, “Daesh,” is credited to Syrian activist Khaled al-Haj Salih; Corinne Segal, “Journalist Live-Broadcasts from Inside Syria in #AleppoLive Chat,” *PBS News*, December 11, 2015, <http://www.pbs.org/newshour/rundown/journalist-live-broadcasts-from-inside-syria-in-aleppolive-chat/>.

43 Ibid.

44 Genevieve Casagrande, “Russian Airstrikes in Syria,” *Institute for the Study of War*, March 10, 2016, <http://www.understandingwar.org/backgrounder/russian-airstrikes-syria-february-27-march-7-2016#sthash.goccmx4.dpuf>.

45 CIVIC interview, Idlib via Skype, December 2015.

46 “Syria aid deliveries difficult despite truce - Red Cross spokesman,” *Reuters*, March 23, 2016, <http://www.reuters.com/article/mideast-crisis-syria-red-cross-idUSL5N16V40L>.

47 “Russia Denies ‘Absurd’ Claims that Air Strikes in Syria are Killing Hundreds of Civilians,” *ABC News Australia*, December 30, 2016, <http://www.abc.net.au/news/2015-12-31/russia-denies-syria-air-strike-claims/7061016>.

48 Natasha Hall, “Hard Evidence that Putin is Targeting Syrian Civilians,” *Newsweek*, January 14, 2016, <http://www.newsweek.com/hard-evidence-putin-targeting-syria-civilians-415728>; “Security Council Unanimously Adopts Resolution 2254 (2015), Endorsing Road Map for Peace Progress in Syria, Setting Timetable for Talks,” United Nations Press Release, December 18, 2015, <http://www.un.org/press/en/2015/sc12171.doc.htm>.

49 “The Killing of 1382 Civilians in January 2016,” SNHR blog, February 1, 2016, <http://sn4hr.org/blog/2016/02/01/17765/>.

50 “Civilian Deaths Drop to Four-Year Low After Syria Truce: Monitor,” *Al Arabiya*, March 27, 2016, <http://english.alarabiya.net/en/News/middle-east/2016/03/27/Civilian-deaths-drop-to-four-year-low-after-Syria-truce-monitor.html>.

While the Russian Federation made a surprise announcement of partial withdrawal of its forces on March 15, Russian air capabilities and Special Forces will continue to play a major role in Syria.⁵¹ A Reuters analysis shows that Moscow has actually shipped more equipment and supplies to Syria than it has brought back since March 15.⁵² At the same time, a strengthened Syrian regime has vowed to retake territory.

While CIVIC remains hopeful that the UN-led diplomatic process will lead to peace, it is unlikely that a diplomatic cessation of hostilities will immediately lead to the protection of all civilians from armed actors and unexploded ordnance. This report highlights the need for international organizations and donor governments to support local civilian protection strategies now so they may better adapt and prepare for each new phase of the conflict and when the country is ready to move into a stabilization phase.

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- 51 Shaun Walker and Patrick Wintour, "First Russian planes leave Syria after order to pull out, Moscow says," *The Guardian*, March 15, 2016, <http://www.theguardian.com/world/2016/mar/15/russian-planes-preparing-to-leave-syria-defence-ministry-putin>. See also: Thomas Gibbons-Neff, "How Russian Special Forces are Shaping the Fight in Syria," *The Washington Post*, March 29, 2016, <https://www.washingtonpost.com/news/checkpoint/wp/2016/03/29/how-russian-special-forces-are-shaping-the-fight-in-syria/>.
- 52 Maria Tsvetkova, "Exclusive: Russia, Despite Draw Down, Shipping More to Syria Than Removing," *Reuters*, March 30, 2016, <http://www.reuters.com/article/us-mideast-crisis-syria-russia-supplies-idUSKCN0WWODJ>.



Image by Khalil Ashawi
A boy in southern Idlib listens for Russian and Syrian communications on wireless walkie-talkies and watches the skies to determine the trajectory of warplanes and warn those in targeted areas (2015).

EARLY WARNING SYSTEMS

“Most of the time, we just use our ears. If you are under the barrels, you do not hear it because of the buzz. But from further away you can hear. The sound is the same for the dropping barrel and the MiG diving down. If you hear the sound, it is far from you. If you do not, it is about to fall on you.”⁵³ - Abdulhakim from Idlib countryside.

Syrians are trying to take control of their fate. In some villages, nearly every person has purchased a walkie-talkie, to be better informed about incoming attacks, despite prices as high as \$400. The number of civilian and military spotters, who watch the skies day and night for planes to feed information to civilians and fighters, in Syria has rapidly grown. At risk to their own lives, they typically call in information about a Syrian or Russian aircraft’s trajectory.

There are countless spotter networks that have varying levels of reliability. Depending on the spotter network, warnings are disseminated via radio stations, walkie-talkies, warning sirens, communications apps like Zello (that operate similarly to walkie-talkies for those with internet access), and Facebook and Whatsapp groups. Sometimes, spotters can eavesdrop on Syrian or Russian military communications. When Russian air strikes began, spotter networks scrambled to find Russian speakers who could interpret overheard communications.

These spotter networks not only give civilians more time to take cover but they also allow rescue teams and doctors to prepare themselves for the immediate aftermath of an attack.

The spotters’ information, however, is imperfect. It is not always reliable and may provide no more than a few seconds of advance warning of an attack. The most common self-protection reaction is to take cover behind a nearby object or on the ground, whether indoors or outdoors.

53 CIVIC civilian interview with Abdulhakim from the Idlib countryside, November 11, 2015.

Russian airstrikes, surface-to-air, and surface-to-surface missiles limited civilians' survival strategies even more. People from Deraa told CIVIC that air raid sirens sometimes provided warning of approaching Syrian helicopters. However, there was no advanced warning for jet fighters, rockets, shelling, and artillery, because of the near impossibility of tracking their trajectory.⁵⁴ Russian Sukhoi fighter jets fire their weapons from a distance, confounding spotters used to tracking MiGs or Mi-8/17 helicopters that drop their payload from above.



Image Courtesy of the Author
Russian strikes leave craters: Kafr Nboudeh, a village in Hama governorate, after Russian airstrikes in October 2015.

With a maximum range of 4,000km and a payload of up to 12,000kg, the Russian Sukhoi Su-34 Fullback creates huge craters, completely annihilating anything or anyone underground.⁵⁵ The Syrian regime's approximately 230kg barrel bombs do not have this capacity and certainly not the range.⁵⁶ Using weapons that are not precision guided such as these on civilian populated areas almost necessarily entails high civilian casualties.

Eyewitnesses describe the Russian planes as a "squadron of ghosts" striking from a distance and not giving people a chance to run for cover because the aircraft are too distant to be seen or heard. A mother from Kafr Nboudeh, a small town in Hama governorate said, "My son went mad with fear when he saw the power of the Russian airstrikes. He had never seen anything like it. They destroyed everything. There is nothing left in our town. It is like they came to finish the regime's work."⁵⁷

The problem is we do not know... where the missiles will strike.

Former residents of Kafr Nbdouda, now IDPs in Jabal Harem camp on the Syrian side of the Turkish border, told CIVIC that violence in the town continued throughout March as there are still attacks launched from nearby regime-controlled areas and from the air.⁵⁸ The town, in any case, was leveled by Russian airstrikes in October 2015 and likely contaminated by unexploded ordnance making return a difficult prospect.

Abdullah, a Syrian from the Latakia countryside who survived a Russian airstrike, shook as he told his story. He was drinking coffee outside at a café in October 2015 when the Russian strikes hit. He ran inside. Three of his friends who did not make it inside the building were killed. He woke up days later with severe injuries at a hospital in Turkey. Shrapnel remained lodged in his face when CIVIC interviewed him. "I saw legs blown off and heads come clean off," he said. "The Russian strikes are really heavy. With Assad's barrels bombs, we had more time usually to move inside or to the first floor. I am on the first floor in my apartment building but the Russians destroy the whole building."⁵⁹

54 CIVIC civilian interviews with civilians over Skype in Deraa via Skype, December 2015.

55 "Daily Airstrikes and Specter of ISIS Loom Over Aleppo Civilians," *PBS Newshour*, January 1, 2016, <http://www.pbs.org/newshour/bb/daily-airstrikes-and-specter-of-isis-loom-over-aleppo-civilians/>, and CIVIC interviews in Turkey and via Skype in Syria, September-December 2015. See also David Cenciotti, "New Stunning Footage of the Russian SU-34 Fullback Bombers Attacking Ground Targets in Syria," *The Aviationist*, October 9, 2015, <http://theaviationist.com/2015/10/09/new-stunning-footage-of-the-russian-su-34-fullback-bombers-attacking-ground-targets-in-syria/>.

56 Ibid.

57 CIVIC civilian interview with Izdihar from Hama, witness to Russian airstrikes, November 12, 2015.

58 CIVIC civilian interview via Whatsapp with Anas from Hama, March 18, 2016.

59 CIVIC interview with civilian (name withheld) in Turkey, on November 13, 2015.

If people can have confidence in the warning system, they can go about their normal lives if they don't hear a warning. They can farm their fields, visit relatives, and live their lives instead of constantly looking to the skies.

safe place in Syria. It is not like there is one plane; it is many. I am a teacher for girls aged five to fifteen and it is impossible to get them to focus. They are used to the planes and people dying but when they hear the sound of the planes, they cannot concentrate and neither can the teachers. They know they might die any second but they still try to go to school.”⁶²

Nothing will protect each and every Syrian from attacks. But experts advise that a better early warning system would provide Syrians with more time to take cover and thus reduce casualties. It is essential to establish a system now, while the imperfect cessation of hostilities holds, that can provide a warning to civilians who will become less vigilant as they are not experiencing daily attacks and provide comfort to them as they resume their daily routines.

A reliable and accurate early warning system for civilians and first responders via siren, mobile, Internet, radio, and television communications could provide people with potentially life saving additional minutes. According to Hala Systems CEO, John Jaeger, “It takes one of the Syrian Air Force’s 80 Mi-8/17 (Hip) helicopters at least 28 minutes and 36 seconds to reach the center of Aleppo City from Hama Air Base and drop its payload of barrel bombs. A 500 lb. bomb takes 28 seconds to land from an altitude of 7000 ft. On impact, the bomb launches fragments that are 90 percent lethal at 40 ft.”⁶³ If people had a few more moments of warning, they could potentially get out of lethal range.

Current warning systems cannot provide detailed information about what is about to be targeted. Warning sirens might sound over a large area. As a result, with great risk to themselves, civilians may stay outside to see the trajectory of the plane. Others have stopped reacting to the sound of planes, since they seemed to be constantly overhead. A media activist explained, “The problem is we do not know the point where the missiles will strike. And the Russians will hit anything.” He gave an example of an airstrike in the village of Oubeen, near the Turkish border where seven people were killed and 15 wounded. “There were kids; it was really bad. That means they are striking border areas now, even displacement camps like Yamadiya. Both Oubeen and Yamadiya were near the Turkish border. Nowhere is safe in Syria.”⁶⁰

Many civilians interviewed shrugged their shoulders: “You hear the siren or get a warning and then what? We still wait for our death because there is nowhere to go.”⁶¹ Indeed the perceived indifference can, at least partially, be attributed to the lack of safe spaces or better self-protection mechanisms.

Mohammad [pseudonym] said, “There are always planes in the sky, constantly. So what are we supposed to do, always be afraid?” A teacher from Idlib said, “There is no

60 CIVIC interview with Amr, a media activist from Jabal Akrad, via Skype, November 13, 2015.

61 CIVIC interviews with former Kafr Nbouda resident, Jabal Harem IDP camp via Skype and Whatsapp, November-December 2015.

62 CIVIC interview with civilian Maarat al-Nu'man via Skype, November 30, 2015.

63 John Jaeger, Hala Systems brochure, January 2016.

If the naked eye in Aleppo is used to detect the helicopter, civilians have mere seconds to take cover or evacuate. In the case of MiGs and helicopters, Syrians might follow the trajectory or sound of the aircraft before the bombs are dropped if they are lucky. According to early warning system experts, developers could potentially interlace existing spotter networks with technology sensors and FM transmitters and receivers for remote control of existing air raid sirens to create a more sophisticated early warning system. What is lacking is the financial support to developers and the necessary materials to do so.

Especially in the months ahead, civilians will need reassurances that returning home or even staying in Syria will be safe. Many have been severely traumatized by the overwhelming force of constant airstrikes and shelling. If the cessation of hostilities holds with some violations, civilians will now be unprepared for intermittent strikes or new military maneuvers. Better early warning could alleviate the mental and emotional strain produced by constant bombardment.

A former opposition fighter said that his mother has been in Turkey for a relatively long period of time but when she hears planes, she cannot function. She still tenses up and cries even though she logically knows that there is no danger from these planes.⁶⁴ The psychological toll that this feeling of uncertainty and helplessness takes on civilians is palpable. “The first order effect of a reliable early warning system is clear: provide civilians with potentially more notice than they have now,” said James Le Mesurier, director of Mayday Rescue. “The second order effect could be even more significant. If people can have confidence in the warning system, they can go about their normal lives if they don’t hear a warning. They can farm their fields, visit relatives, and live their lives instead of constantly looking to the skies.”⁶⁵

Funding for research and equipment is urgently needed to seamlessly incorporate existing spotter networks with enhanced technology to create a more dependable early warning system. Civilians on the ground would have more time to take shelter and a more accurate idea of where an attack will take place.

64 CIVIC interview with Ahmed in Antakya Turkey on September 15, 2015.

65 CIVIC civilian interview, Ahmed, Sarmada via Skype, November 11, 2015.



Image by Khalil Ashawi

Medical workers inside a field hospital set up inside a mountain in northern Hama due to the repeated strikes on hospitals by Syrian and Russian warplanes (2015).

PROTECTION OF MEDICAL INFRASTRUCTURE AND EDUCATIONAL FACILITIES

“We had a small medical point. We cannot have a field hospital because the regime will hit it. There are no beds because there is no place for people. Doctors have to treat them the same day, and they have to come and go. They treat 100 people a day. The serious war injuries have to go to Bab al Hawa hospital [close to the Turkish border], which takes two and half hours even though it is only 150 km [68 miles] away, so many people die on the road.”⁶⁶ - Head of the Local Council in Kafr Nboudeh, a survivor of Russian airstrikes.

Since the conflict began, the Syrian government targeted medical personnel, health facilities, and even hit schools or launched attacks close to these buildings, a practice emulated by Russian forces.⁶⁷ Physicians for Human Rights (PHR) and other organizations have carefully documented attacks on the medical community. In a November 2015 report, PHR detailed the deaths of 697 medical personnel and 336 attacks on medical facilities,⁶⁸ with the Syrian government responsible for 90 percent of attacks.⁶⁹ More than 157 health professionals had been executed or tortured to death. Many medical professionals have fled because of the personal dangers. In Aleppo alone, over two-thirds of the hospitals no longer function, and about 95 percent of doctors have fled, been detained, or killed.⁷⁰

The government effectively criminalized medical assistance to the opposition through Laws 19, 20 and 21.⁷¹ Passed in 2012, these measures broadly define what constitutes a “terrorist act, terrorist organization and terrorism financing.” Decree 22 was issued the same year, creating the Counter-Terrorism Court. All known cases referred to this court pertain to detainees charged with participation in acts of peaceful dissent such as “participating in demonstrations, documenting protests, and/or providing medical care to the wounded or delivering relief.”⁷² This law violates customary international humanitarian law, which states, “Under no circumstances shall any person be punished for carrying out medical activities compatible with medical ethics, regardless of the person benefiting there from.”⁷³

66 CIVIC interview, Abu Qusai, head of the Local Council in Kafr Nboudeh and survivor of Russian airstrikes in Jabal Harem IDP camp via Skype, November 10, 2015.

67 CIVIC interview, Daher Zedan, Reyhanli, Turkey, November 9, 2015.

68 Physicians for Human Rights, *Anatomy of a Crisis: A Map of Attacks on Health Care in Syria*, Findings as of November 2015, https://s3.amazonaws.com/PHR_syria_map/findings.pdf.

69 PHR, *Aleppo Abandoned: A Case Study on Health Care in Syria*.

70 Ibid.

71 United Nations Human Rights Council, Report of the Independent International Commission of Inquiry on the Syrian Arab Republic, A/HRC/28/69, 9th report, February 5, 2015, <http://www.ohchr.org/EN/HRBodies/HRC/IIICISyria/Pages/IndependentInternationalCommission.aspx>.

72 For a detailed analysis of Laws 19, 20, 21, and 22 and their effects on civilians, see: Violations Documentation Center, *Special Report on Counter-Terrorism Law No. 19 and the Counter-Terrorism Court in Syria*, April 2015, <http://www.vdc-sy.info/pdf/reports/1430186775-English.pdf>.

73 International Committee of the Red Cross (ICRC), Additional Protocols I (art. 16 (1)) and II (art. 10 (1)) to the Geneva Conventions of 12 August 1949; and see also United Nations Human Rights Council, “Assault on Medical Care in Syria” Human Rights Council, Twenty-fourth session, Agenda item 4, “Human rights situations that require the Council’s attention”, A/HRC/24/CRP.2, September 13, 2013.

The number of indirect deaths resulting from degraded infrastructure or reduced availability and quality of care is highest where the regime has specifically targeted medical infrastructure and personnel.⁷⁴ The disintegration of health infrastructure, restrictions on movement, and attacks on the medical community has led to an increase in deaths from preventable diseases and normally non-life threatening health concerns and injuries.

It is a total catastrophe. There are no real hospitals. People, dead and alive, are sitting in the halls at the medical points together because there is nowhere to put the dead.

According to OCHA, 42 percent of pregnant women schedule caesarian sections, to avoid the danger of an attack preventing them from reaching care.⁷⁵ Jomana Qaddour, co-founder of Syria Relief and Development, speaking at a conference on Syria in January 2014, said she knew of a woman who underwent a C-section without anesthesia or electricity.⁷⁶ A polio outbreak highlighted the dangers to civilians if the healthcare system is allowed to degrade further.⁷⁷ During a vaccination campaign, some non-medical

personnel were provided vaccines to give to children, some of whom went into shock because of being given an incorrect substance or a vaccine not kept at the right temperature.⁷⁸ Communicable diseases like tuberculosis are on the rise again and hepatitis has become commonplace.⁷⁹ Internally displaced persons camps have also become overcrowded and without proper medical staff and supplies, this can also lead to the spread of disease.

Most families in Syria are coping with both war and non-war related medical issues. A doctor from Douma told CIVIC the horrifying experience of his own family.

My brother's wife lost both her legs in an airstrike, and they just sewed it up and did not give her any medication afterwards, so there was an infection and she was in constant pain. It is a total catastrophe. There are no real hospitals. People, dead and alive, are sitting in the halls at the medical points together because there is nowhere to put the dead.⁸⁰

He added that, despite the danger and expense, his family left Syria to seek medical help for his son, whose condition was not war-related. "The hospitals are busy with people who have war injuries," he said.⁸¹

The proliferation of checkpoints has also curtailed movement of people trying to escape or seek medical treatment. Rudi, from Afrin, was a private university student in western Aleppo, "At first, there were not a lot of checkpoints. It was just one and then they were erected every 100 meters and 200 meters. There were 30 to 40 regime checkpoints from just Afrin to Aleppo [about 40 miles] by the time I left in 2015."⁸² For an injured person, the number of checkpoints is a life or death matter. It should be noted that the agreement for

74 PHR, *Anatomy of a Crisis: A Map of Attacks on Health Care in Syria*, November 2015. See also Kareem Shaheen, "MSF stops sharing Syria hospital locations after 'deliberate' attacks," *The Guardian*, February 18, 2016.

75 United Nations Office for the Coordination of Humanitarian Affairs, *OCHA Humanitarian Needs Overview 2016: Syrian Arab Republic*, October 2015.

76 Jomana Qaddour, "Mapping the Crisis: Saving Syria's Civilians: Urgent Priorities and Policies," Conference at the National Press Club in Washington DC, hosted by the Middle East Institute, January 31, 2014.

77 Annie Sparrow, "Syria's Polio Epidemic: The Suppressed Truth," *The New York Review of Books*, February 20, 2014, <http://www.nybooks.com/articles/2014/02/20/syrias-polio-epidemic-suppressed-truth/>.

78 Jomana Qaddour, "Saving Syria's Civilians: Urgent Priorities and Policies".

79 Lina Murad, "Five Years of War in Syria: Health Care Under Attack," Hearing at the Rayburn House Office Building, hosted by the Tom Lantos Human Rights Commission, March 31, 2016.

80 CIVIC interview, Ahmed from Douma, Syria, Gaziantep Turkey, September 21, 2015.

81 Ibid.

82 CIVIC interview, Rudi from Afrin, Gaziantep Turkey, September 2015.

the cessation of hostilities has not delivered on unimpeded access for humanitarian aid due to security and cumbersome permissions and coordination required to deliver assistance.⁸³ In particular, the Syrian regime has taken surgical equipment and other medical supplies, including treatments for child malnutrition and medicine for preventing bleeding after childbirth, out of medical kits provided by humanitarian organizations.⁸⁴

A young man from Homs who was shot in the back by Syrian army soldiers and paralyzed told CIVIC, “Even with the injury it took 21 hours to get through the checkpoints to get to Turkey. Everyone wanted to know why a single man from this part of Homs was shot and trying to leave.”⁸⁵ Asked about seeking medical care in Homs, one of Syria’s largest cities, he said, “What doctors? Everyone left. We only have very simple medicine. God be with you if you are injured or sick in Syria.”⁸⁶

The remaining hospitals are left trying to protect their structures and patients as best they can. Several medical facilities have been built in caves, where the mountain affords natural protection against airstrikes. Although, at least one cave hospital in Aleppo province was destroyed when the regime dropped a barrel bomb on it. More often, hospitals use the first floor or basement of an existing building, in hope of minimizing damage from airstrikes. Ahmad Tarakji, president of the humanitarian organization Syrian American Medical Society (SAMS), said nearly all of his organization’s 120 field hospitals — employing about 800 medical staff — are underground.⁸⁷ Dr. Lina Murad of SAMS stated that there has always been reticence to support these efforts because “it is basically an admission that the war will go on,” but she went on to say at a March 2016 congressional hearing that they are continuing to build underground in addition to proliferating medical points because of the reality on the ground.⁸⁸

Shadi Martini, of Orient, the Syrian medical humanitarian NGO said they use the first floor as a clinic where patients typically do not stay for a long period. A basement is used for in-patients and the operating theater. All other floors are blocked off; the building is surrounded by sandbags.⁸⁹

What doctors? Everyone left. We only have very simple medicine. God be with you if you are injured or sick in Syria.

Underground spaces are typically not well ventilated or well lit. These unfavorable conditions are even more acute for medical facilities, where lighting, heating, and electricity can be a matter of life or death. If these facilities are to move underground, donor governments and humanitarian NGOs could finance the needed physical improvements. This effort should be accompanied by support to develop smaller, more widespread medical points for victims of shelling and aerial bombardment, and clinics to receive people with medical issues not related to the violence.

Officials from some international NGOs, however, told CIVIC that they fear shelters, underground hospitals, and schools will be used by armed groups as bunkers and operations rooms. Our interviews suggested that, outside of ISIS-held territory, this was not typically the case. When asked if armed groups occupy their hospitals for military purposes potentially making them targets for the Syrian or Russian air forces, Khaled Almilaji, the country director for Canadian International Medical Relief Organization (CIMRO), said, “On the contrary, no one wants to be close to a hospital because it turns them into a target; not the military groups

83 “Syria Lull Brings Deaths Down But Little Else,” IRIN News, March 29, 2016.

84 Ibid.

85 CIVIC interview with Syrian civilian (name withheld), Rehab Center in Reyhanli, Turkey, September 16, 2015.

86 Ibid.

87 Leticia Miranda, “Syria’s Medical Clinics: Inside Caves, Basements, and Dirt,” *BuzzFeed News*, December 10, 2015, <http://www.buzzfeed.com/leticiamiranda/syrias-hospitals-go-underground-as-bombs-fly-overhead#.ixZn3q4kqV>.

88 Lina Murad, “Five Years of War in Syria: Health Care Under Attack,” March 31, 2016.

89 CIVIC interview with Shadi Martini, Washington, DC, December 11, 2015.

and not the civilians because hospitals are the first things to be attacked.”⁹⁰ For the same reason, a Syrian doctor told SAMS, “When I am in a hospital, I feel like I am sitting on a bomb.”⁹¹

An official with the UN told CIVIC that that, while there is a clearly recognized need for more protected hospitals, “they will just be destroyed by the regime anyway.”⁹² The fact that the humanitarian community recognizes that the medical establishment has been targeted to this degree and is still slow to provide support to protect these vulnerable but vitality important services is indicative of the level of despair in Syria.

...no one wants to be close to a hospital because it turns them into a target...

Khaled Almilaji predicts that doctors and nurses will return to Syria if working conditions are safer.⁹³ Ideally, he said, two to three reinforced, partially underground hospitals would operate in every governorate. But he acknowledged that this would be a costly program for many donors to consider. His organization has received support for the

renovation of an existing hospital with multiple operating theaters and an underground parking place for the ambulance – a “big deal,” Almilaji says.⁹⁴ The hospital could still be targeted. But the promise of a more secure structure is enticing medical staff to return. Khaled predicts that health professionals would be willing to return elsewhere in exchange for similar security improvements. Syrian health professionals in Turkey who are unable to work are eager to return, believing in the indispensable help they provide.

The war has taken its toll on health practitioners. The drain on medical workers reached acute levels and medical students have been pushed to practice medicine beyond their level of training and experience. Doctors that remain have been under unimaginable levels of stress. In 2013, Dr. Abdulaziz always had a walkie-talkie with him at al Sakhour hospital in Aleppo. While operating in April 2015, he overheard that the planes had left Hama airport and were targeting his hospital.⁹⁵ Al Sakhour, a hospital that serves around 400,000 people, was forced to close its operation after being attacked twice on consecutive days in late April 2015 by regime rockets and barrel bombs.⁹⁶

Health professionals need to be incentivized to stay in Syria and in neighboring countries. It is politically difficult in the short-term for neighboring countries to allow more refugees to practice their professions, but it is essential for long-term stability of the region. A streamlined certification process for Syrian medical professionals to, at least, be able to serve Syrian refugees would benefit the entire refugee population.

The international donor community is recognizing the importance of better safeguarding medical facilities for communities and for retaining medical professionals. The 2015 Humanitarian Pooled Fund, in coordination with the UN clusters, allocated \$1.5 million for health with a priority to provide “support to trauma management in fortified or underground healthcare facilities.”⁹⁷ Major activities included reinforcing, establishing, and rehabilitating underground health facilities and replacing ambulances damaged by the attacks and maintaining existing ones, in addition to building the capacity of clinical staff and improving post-operative care.

Some medical NGOs have had to negotiate with armed groups, particularly Jabhat al Nusra, to take back control of the administration of facilities.⁹⁸ However, the Violations Documentation Center noted that such interference with medical facilities by armed groups remains rare.⁹⁹ Countries, providing financial and lethal assistance to

90 CIVIC interview via Skype with Khaled Almilaji in Gaziantep, December 28, 2015.

91 Lina Murad, “Five Years of War in Syria: Health Care Under Attack,” March 31, 2016.

92 CIVIC interview with UN Official (name withheld), in Gaziantep, Turkey, November 16, 2015.

93 CIVIC interview with Khaled Almilaji, December 28, 2015 Skype to Gaziantep.

94 Ibid.

95 CIVIC interview with Daher Zedan, November 9, 2015 Reyhanli.

96 “Main Aleppo hospital forced to shut down after attacks,” *Al Jazeera*, 5 May 5, 2015.

97 UN Office for the Coordination of Humanitarian Affairs, *Humanitarian Pooled Fund (HPF) in Turkey: 2015 2nd Standard Allocation Strategy Paper*, November 8, 2015, https://www.humanitarianresponse.info/en/system/files/documents/files/hpf_2015_sa2_allocation_paper_final_11_08_2015.pdf.

98 CIVIC interview with Daher Zedan, November 9, 2015; Reyhanli, and CIVIC civilian interviews in Turkey in November 2015; and CIVIC interview with Bassam al-Ahmad, director of VDC, via Skype, December 13, 2015.

99 CIVIC interview with Bassam al-Ahmad, director of the VDC via Skype, December 13, 2015.



Image by the Syrian Civil Defense
Treating a child after a chlorine gas attack in Khan Sheikhun, Idlib (2015).

armed groups have the responsibility to ensure that groups that they support do not misuse hospitals or manage hospital affairs, as it compromises hospitals' neutrality. According to the Violations Documentation Center, civilians may believe that armed groups are protecting them with their presence.

NGOs on the ground and countries supporting these armed groups should emphasize that interference with health facilities and civilian objects puts their families and communities in greater jeopardy and cannot be tolerated. At the same time, the Syrian government and its allies must recognize that all injured persons have the right to treatment under international humanitarian law; impartial medical assistance cannot be considered criminal or terrorist activity.

School-aged children have also been deeply affected as a result of Syrian Air Force attacks that have struck classrooms.¹⁰⁰ Local NGOs have steadily adapted and are beginning to hold school

classes in basements all over opposition-held areas to protect children from air attacks. The Douma-based Rawad al-Huda Education Initiative built air-raid shelters directly in or nearby all but two of the schools under the organization's supervision.¹⁰¹

In Douma, it is now standard procedure to start and end the school day early and cancel breaks between classes to reduce the time students are concentrated together.¹⁰² Students leave in different waves so that they will not be targeted. After a Russian airstrike in January 2016 hit a school in Ain Jara, 12 kilometers west of Aleppo city—killing at least eight children and a teacher among other civilians—the Free Aleppo Directorate of Education told media activists that it would expand a policy initiated after the Russian airstrikes to move students underground.¹⁰³ Even after the cessation of hostilities, the dangers continued. On March 31, 2016, Syrian regime airstrikes hit the main school, hospital, and Syrian Civil Defense head quarters in Deir al-Asafeer, a suburb of Damascus in eastern Ghouta. At least 32 were killed.¹⁰⁴

Hundreds of classrooms in other parts of the country are already situated in basements and underground spaces to protect classes from bombardment. These locally based solutions aimed at continuing the education of Syrian children need further support as underground spaces are, oftentimes, damp, dark due to lack of electricity in Syria, cold due to lack of fuel, and inadequately ventilated.

There is now an acknowledgment in funding priorities that this work is vital to civilian protection but this recognition took time. A Syrian humanitarian worker provided an example of the disconnect: when Syrian NGOs initially requested assistance for schools to be operated underground to protect them from attacks, international NGOs (INGOs) said they were using their funds to try to highlight child recruitment issues. This was puzzling to local NGOs who said that if children do not go to school for fear of armed attacks, they are more likely to be recruited by armed groups.¹⁰⁵ Better communication and coordination between those on the ground and international NGO partners is needed to effectively safeguard civilian infrastructure.

NGOs have been adapting to the increasingly challenging conditions to find solutions for civilians and will continue to need to find new strategies as the conflict shifts dynamics over time. Despite the concerns mentioned, aid organizations and donor countries should renovate and support health and education facilities; so dire are the needs.

100 CIVIC civilian interviews, Turkey and Syria, September-December 2015.

101 Orion Wilcox, "Day after call for international condemnation, regime targets school in Douma," *Syria: Direct*, December 13, 2015.

102 Ibid.

103 Alaa Nassar and A-Nasser, Nisreen, "In rebel-held Aleppo, schools move underground after years of air strikes," *Syria: Direct*, October 26, 2015, <http://syriadirect.org/news/in-rebel-held-aleppo-schools-move-underground-after-years-of-air-strikes/>.

104 See Syria Ceasefire Monitor, The Syria Campaign, <http://www.syriaceasefiremonitor.org/>, accessed on March 31, 2016.

105 CIVIC interview with doctor and humanitarian aid provider based in Turkey, December 28, 2015.



Image by the Syrian Civil Defense
Members of the Syrian Civil Defense run towards a site hit by two barrel bombs dropped by forces loyal to Syria's President Bashar al-Assad in al-Katerji district in Aleppo May 18, 2014.

LOCAL RESCUE AND AID TEAMS

“There are two centers for Syrian Civil Defense [White Helmets] in our region that have simple equipment. They help people trapped under the rubble and transfer unexploded weapons from the streets and homes. They appear quickly after a bombing to assist in the evacuation of the wounded and fire fighting. They also implement some mine risk awareness in schools and neighborhoods campaigns.”¹⁰⁶ - Mahmoud, from Deraa.

When a government disappears, other entities must fill the vacuum to provide policing, education, and other basic services. When international humanitarian aid and protection cannot be delivered, civilians are the first line of defense. Training and deploying life-saving local rescue and aid teams can fill this gap for areas impossible to access to provide a variety of services. Post-attack rescue efforts, in particular, emerged as one of the most critical services for civilian survival.

The Syrian Civil Defense (SCD)—or “The White Helmets” as they are commonly referred to because of the color of their helmets—were organized in early 2013 as first responders to bomb attacks against civilian communities.¹⁰⁷ According to James Le Mesurier, founder of the program, they started as an ad hoc, voluntary organization that initially trained a single team of 20 people. Le Mesurier says the numbers have since grown to 2,790 volunteer men and women operating from 110 different locations.¹⁰⁸ They receive a minimal stipend for their work.

¹⁰⁶ CIVIC interview with Syrian civilian from Deraa (name withheld) via Skype, December 2015.

¹⁰⁷ Nicknamed based off the distinctive helmets they wear in the line of duty and often referred to by their Arabic name al difa’ al madani or the Civil Defense. They have become such an integral part of protection and rescue efforts that CIVIC added questions about them specifically to civilian interviews.

¹⁰⁸ CIVIC interviews, James Le Mesurier, Istanbul, Turkey, September 2015.

Civilians were overwhelmingly admiring of SCD, in contrast to their mixed opinions of armed groups, local councils, and other NGOs. Abu Riyadh, who worked at the port of Latakia before the war, told CIVIC:

They [Russian airstrikes] are targeting the town of Salma like crazy with everything. Most of the victims are civilians. Between two and five in the morning there were many Russian airstrikes in areas that were 99 percent civilian. The Civil Defense help a lot. At three in the morning they came right away to help the wounded. They are ready 24 hours a day. If they hear any news from walkie-talkies, they come directly to rescue people.¹⁰⁹

A man in Aleppo city told Syrian journalist Rami Jarrah during a live news feed, “Without them [the White Helmets], there’s no life in our city.”¹¹⁰ In many locations, the White Helmets run the warning sirens, sounded after spotters report sightings of hostile forces.

Local rescue and support teams, knowingly, take on a great deal of responsibility and threat to their own lives. Many civilians relayed their experiences with the “double tap” strike. This tactic, used by Assad-aligned forces, involves bombing an area, waiting several minutes for first responders and others to gather, and then striking again. Civilians noted that many White Helmets have lost their lives this way; over 100 White Helmets have died and more than four times that have been seriously injured.¹¹¹ White Helmets and civilians have learned to wait for a short period before launching a rescue effort. Civilians trusted these teams because they were reliable and took on this kind of risk with essentially no reward, unlike many other actors in the conflict.

Without them [the White Helmets], there’s no life in our city.

The White Helmets report having saved well over 40,000 lives as of the end of 2015, a number that continues to grow. They are now expanding into other areas, delivering public services such as reconnecting electrical cables and water lines.¹¹² As a result of the trust they built with communities over the years, the White Helmets can be a reliable entity to deal with the many challenges that Syrians face today and in the future.

Le Mesurier, the founder of Mayday Rescue, which provides support to the White Helmets, said one of its most urgent needs is more equipment such as fire trucks, ambulances, and 4x4 pickup trucks.¹¹³ The Syrian regime and Russian military attacks, unfortunately, destroyed this equipment on a regular basis. He emphasized that these are also items that will be useful in Syria regardless of how the conflict or peace talks progress and are relatively inexpensive. Smaller fire trucks are preferred, since they can travel down narrow roads and are less of a target for airstrikes.¹¹⁴

The skills and equipment acquired by local aid and rescue teams will benefit civilians whatever the course of the fighting, and after the fighting ends. A wide network of community-based teams will help begin reconstruction before large international donors are able to respond.¹¹⁵

109 CIVIC interview, Abu Riyadh from the Latakia countryside, via Skype, November 13, 2105.

110 Yasmin Noh, “Watch: A Rare Glimpse into Daily Life Amid Syria’s Bloody War,” *The World Post*, December 17, 2015, http://www.huffingtonpost.com/yasmin-nouh/syria-journalist-video_b_8821100.html.

111 Janine Di Giovanni, “Syria’s White Helmets Save Civilians, Soldiers and Rebels Alike,” *Newsweek*, January 21, 2016, <http://www.newsweek.com/2016/01/29/white-helmets-syrian-civil-war-418001.html>.

112 Syrian Civil Defense, “Unarmed and Neutral,” <https://www.whitehelmets.org/>.

113 CIVIC interview with James Le Mesurier in January 2016.

114 Ibid.

115 CIVIC interviews with James Le Mesurier in January 2016.



Image by Khalil Ashawi
A man carries unexploded cluster bombs dropped by Russian warplanes in southern Idlib, where a bombing killed more than nine people and injured dozens (2015).

PROTECTION FROM UNEXPLODED ORDNANCE

“I know many people who died. My four-year-old cousin died from a cluster bomb. We have been displaced and had to return to our farms a few times and that is usually when people are killed.”¹¹⁶ – Anas, from Kafr Nbouda, Hama governorate.

Landmines, artisanal mines, coalition unexploded ordnance, improvised explosive devices (IEDs), and cluster munitions present a large and growing threat throughout the country. According to demining and violations documentation groups, attaining figures for deaths specifically caused by the unexploded remnants of war is difficult and, therefore, official statistics do not exist or are out of date.¹¹⁷ In 2013, the Landmine and Cluster Munition Monitor received reports of at least 151 deaths by cluster munitions with only nine fatalities resulting from unexploded submunitions.¹¹⁸ Yet, half of the Syrians interviewed by CIVIC knew of at least one person who had been killed or severely injured by UXO and the majority of interviewees considered them to be a major concern. Many of the victims were children or farmers returning to work their lands.

The dangers are growing, in part, because of Russian use of cluster munitions.¹¹⁹ According to manufacturers, cluster bombs have a 10-20 percent failure rate.¹²⁰ In reality, if dropped on soft ground or if the weapon system is faulty, the failure rate can be as high as 70 percent.¹²¹

116 CIVIC civilian interview over Skype with Anas, November 12, 2015.

117 “Casualties and Victim Assistance,” Landmine & Cluster Munitions Monitor Archive, <http://archives.the-monitor.org/index.php/LM/Our-Research-Products/Cluster-Munition-Monitor/CMM2014/Casualties-and-Victim-Assistance>.

118 Ibid.

119 “Russia/Syria: Extensive Recent Use of Cluster Munitions,” *Human Rights Watch News*, December 20, 2015, <https://www.hrw.org/news/2015/12/20/russia/syria-extensive-recent-use-cluster-munitions>.

120 Ibid; HRW has verified the use of RBK-series cluster bombs containing SPBE, AO-2.5 RT/RTM, and ShOAB-0.5 type explosive submunitions and ground-launched 9M27K/9M27K1 rocket (BM-27 Uragan), 9M55K rocket (BM-30 Smerch), 3O8 projectile, 9M79-series Tochka ballistic missile containing 9N210/9N235, 9N235, O-10, and 9N24 submunitions respectively. See “Russia/Syria: Extensive Recent Use of Cluster Munitions,” *Human Rights Watch News*, 2015.

121 CIVIC conversations with Luke Irving of Mayday Rescue in Turkey, December 2015 and January 2016.

The first six months of 2015 brought a dramatic increase in casualties from victim-activated IEDs and UXO.¹²² Territory liberated from ISIS, like Kobane, was especially dangerous since ISIS littered the area with booby traps. There is even a museum in Kobane of UXO and IEDs recovered from the days of ISIS control. Handicap International estimated that there had been five to seven incidents weekly in May 2015 resulting in casualties, most of them suffered by returnees and locally formed explosive ordnance disposal (EOD) teams.¹²³ Civilians were reportedly told that Kobane was cleared of UXO and IEDs in order to encourage people to return.¹²⁴

Despite concerns raised about UXO from local and international groups since 2012, including CIVIC, the international community has been slow to respond.¹²⁵ This is due, in part, to restrictions on transferring explosive materials necessary for disposal to local groups in Syria and the lack of accessibility in Syria by international demining groups. The dangers, however, are too widespread to be remedied just by international experts, and need to be undertaken by Syrians.

No organization wants to take the risk when people may be harmed.

Our interviews suggest that in cities and populated areas, armed groups and the Syrian Civil Defense are doing their best to empty populated areas of these insidious weapons. The armed groups typically harvest them for their own makeshift weapons.¹²⁶ CIVIC does not have figures on how many people have been killed harvesting the explosives. But there is a clear need for additional risk education and training regarding UXO awareness and disposal. Kurdish forces known as the Yekîneyên Parastina Gel, or People's Defense Units (YPG), were confident that they had the UXO and IED situation under control in Kobane after ISIS retreated. However, in 2015, the YPG demolition team lost 36 of

their 40 "experts," according to UNMAS officials.¹²⁷ Casualties during these operations reduced the capacity of Syrian organizations conducting ad hoc clearance by half.¹²⁸

Turkish authorities and international NGOs are concerned that trainings on UXO disposal give trainees the knowledge and equipment to make an IED.¹²⁹ According to some demining experts in southern Turkey, the Turkish Government fears that those who have been trained in the art of explosives disposal will use this expertise for terrorist attacks in Turkey. But, as one UNMAS official pointed out, Syrians are already adept at creating IEDs and other explosives weapons themselves five years into the conflict. However, that same official recognized that, "No organization wants to take the risk when people may be harmed."¹³⁰ Luke Irving, the Operations Officer for Mayday Rescue in Turkey, who is training SCD in non-explosive disposal techniques, also mentioned that there is "a risk that civilian clearance teams could be targeted by armed groups or criminals in Syria, as explosives and explosive accessories such as detonators are highly desirable items."¹³¹

122 "Syria: Casualties and Victim Assistance," Landmine & Cluster Munition Monitor, last modified September 3, 2015, <http://www.the-monitor.org/en-gb/reports/2015/syria/casualties-and-victim-assistance.aspx#ftn10>.

123 Handicap International, *Kobani: A City of Rubble and Unexploded Devices*, May 2015, <http://handicap-international.ca/en/kobani-a-city-of-rubble-and-explosive-devices>.

124 CIVIC interview with UNMAS official, Turkey, November 30, 2015.

125 Center for Civilians in Conflict, "Issue Brief: Civilian Protection in Syria," December 2012, http://civiliansinconflict.org/uploads/files/publications/Syria_Public_Brief_Dec_2012.pdf; and see Center for Civilians in Conflict, "Syria: Civilian Harm and Assistance," September 2013, http://civiliansinconflict.org/uploads/files/publications/Syria_Post-Harm_Brief_Sept_2013.pdf.

126 CIVIC interviews with armed groups and civilians in Turkey and Syria, September and November 2015.

127 CIVIC interview with UNMAS official, Turkey, November 30, 2015.

128 "Challenges," United Nations Mine Action Service, last modified November 2015, <http://www.mineaction.org/programmes/syria>.

129 CIVIC interviews with demining organizations in Turkey September and November 2015.

130 CIVIC interview in Turkey with UNMAS official in Turkey, November 30, 2015.

131 CIVIC conversation with Luke Irving of Mayday Rescue, January, 19 2016.

Demining groups have countered this view with recent experience. In Kobane, ordnance disposal teams destroyed six tons of explosives in one place in 2015.¹³² While concerns that the knowledge and equipment could fall into the wrong hands are real, experts used this example to say that those six tons of explosives could have been put in a truck and driven to a Turkish city to inflict unimaginable damage.¹³³

The Turkish Ministry of Defense has established a Mine Action Centre to coordinate UXO disposal. But because it cannot yet make executive decisions on issues such as INGO registration or implementation standards, it is difficult for demining organizations to carry out their work.¹³⁴

The White Helmets have launched a project to use non-explosive methods to dispose of UXOs.¹³⁵ The organization is relying on non-explosive methods because of the concerns discussed above and because a local entity engaged in explosive disposal methods could be a target for groups wanting the materials for military purposes.

Risk education on the dangers of UXO is urgently needed. Mohannad from Hama governorate said, “The military groups come and they take the barrel or the unexploded shells. They take the TNT and reuse it. But civilians will also sell them to the military groups.”¹³⁶ While he added that, “now we do not have that situation anymore because the Free Syrian Army will come right away and take the bomb,” civilians may still turn to harvesting UXOs as a source of much needed money. Activists in Aleppo told CIVIC that armed groups will pay \$25 per kilogram of explosives.¹³⁷

Syrian Civil Defense disseminates information about their dangers to civilians at schools, mosques, and other public spaces. According to UNMAS, in the latter half of 2015, NGO partners reached 110,000 people with risk education and provided safety briefings to 166 UN and NGO staff.¹³⁸ Given the need, funding to effectively reach civilians with risk education material must be pursued into the future.

While the Syrian Air Force’s barrel bombs were indiscriminate and destructive, they mostly either exploded on impact or fell apart. However, Russia’s use of cluster munitions and advanced weaponry further endangers Syrian civilians and frustrates Syrian humanitarian NGOs who see no repercussions for the use of this internationally banned weapon. This insidious threat could plague rebuilding efforts for decades. “It took 20 years to de-mine Mozambique to an acceptable standard,” said Luke Irving of Mayday Rescue. “It took three years to clear Georgia after just a five-day war in 2008.”¹³⁹ A local approach could greatly accelerate the UXO disposal process. The sooner disposal and awareness begins, the better for civilian protection.

A local capable entity to dispose of UXOs will be needed to protect civilians on the ground now and certainly in the future as Syrians return home. Given international NGOs’ inability to access much of the country, training should be provided to trusted local NGOs working inside the country to tackle UXO disposal and mark off dangerous areas.

132 CIVIC interview in Turkey with UNMAS official in Turkey, November 30, 2015.

133 Ibid.

134 CIVIC conversations with UNMAS and Luke Irving of Mayday Rescue, December 2015 and January 2016.

135 CIVIC interviews with Civil Defense, Turkey, September and November 2015.

136 CIVIC civilian interview over Skype with Mohannad from Hama, via Skype 15 November 15, 2015.

137 CIVIC interview with activist in Aleppo, January 21, 2016.

138 UNMAS, *Syria Factsheet*, March 8, 2016.

139 CIVIC conversation with Luke Irving of Mayday Rescue, January 19, 2016.



Image by Khalil Ashawi
A civilian in southern Idlib listens to Syrian Army frequencies to warn targeted areas about airstrikes and other military maneuvers (2015).

A PLATFORM FOR SELF PROTECTION STRATEGIES

“If I am at home, I put the kids in a room without windows, and if you are on the second floor, you go down to the first. Here at the rehabilitation center, we do not have anything. No shelters or anything like that. The other day I saw this small child get under a plastic chair in the waiting room when he heard the plane. The Russian planes are terrifying. Now we just pray.”¹⁴⁰ – Ahmed, from Sarmada, Idlib governorate.

Attacks in opposition-held areas have led Syrians to devise their own survival techniques. People put sandbags around buildings likely to be hit. If traveling at night, they drive without lights as the glow can be targeted from the air. But few Syrians could cite agreed upon emergency or evacuation plans even within families. Those that did said they had simply gathered their documents in one place so they could quickly take them and run.

Indeed, internal and external displacement has been a vital survival strategy. Activists move from house to house to avoid persecution; individuals wanted by the government may escape to rebel-held areas. People in rebel-held areas who may fear Syrian government attacks but do not face forced military conscription or government arrest flee to regime-held areas.

However, even internal displacement can be disorienting, dangerous, and expensive. Many families cannot afford moving, and others have spent their savings on rent in their new location.¹⁴¹ One father whose family has been on a long odyssey through Deir Ezzour, Albu Kamel, Raqqa, Aleppo, Afrin, and eventually to Turkey said, “We Syrians are like Sinbad”¹⁴² referring to the fictional legendary sailor who travels to strange and dangerous lands. Those unwilling or unable to leave their homes have devised self-protection strategies with little to no assistance.

140 CIVIC civilian interview, Ahmed, Sarmada via Skype, November 11, 2015.

141 CIVIC interviews with civilians, Turkey and Lebanon, September and November 2015. See also UN OCHA: Syrian Arab Republic, *OCHA Humanitarian Needs Overview 2016*, October 2015.

142 CIVIC interview with civilian (name withheld) in Turkey, September 18, 2015.

Civilians faced many hurdles trying to counter the tactics of armed actors at various stages in the conflict. The overwhelming bombardment from the Syrian Air Force and later the Russian military complicated initial efforts to escape street-to-street combat. Few traditional Syrian homes have basements so most people simply moved to a safer room of the house or apartment building. Abduljassim, father of 14 children, explained the difference between light arms fire and explosive weapons to a civilian:

*In the beginning of the war, there were more battles in the streets with lighter weapons. We hid in our houses when that happened. But we have no idea when or where the next barrel will fall. If the planes stopped, I would go home.*¹⁴³

There are few to no reinforced structures, air raid shelters, or blast walls to protect against artillery and munitions. The lack of adequate preparation time and the targeting of gathering places made the creation of shelters a moot point. Some of the formal shelters that existed before the war were destroyed by repeated air strikes.¹⁴⁴ A man from Deraa told CIVIC that, “in one such massacre, a family of 11 people, all women and children, were killed in a shelter adjacent to their house.”¹⁴⁵

Civilians improvised. Because of the lack of proper shelters and the Syrian Air Force’s documented practice of targeting gathering places,¹⁴⁶ civilians dug ditches with their hands and simple tools (about one to two meters deep) that they could jump into with a second’s notice. People in areas like Deraa, which has been bombed frequently, also reported that they had dug outside trenches or basement shelters under their homes. Those that did not said that the ground was composed of hardened clay, making it impossible without tools. Others, if possible, ran to caves for safety.

Then, Russian airstrikes further compromised the effectiveness of moving underground. While Syrian barrel bombs resulted in extensive infrastructure damage, an indirect attack rarely leveled an entire building to its basement or even lower levels. Mahmud from Deraa explained:

*Homes are generally not equipped. Most people do not see the benefit of preparing against the intensity of an explosion, which completely destroys walls. We have seen a large number of massacres against civilians when helicopters targeted shelters with explosive barrels or rockets from warplanes. . . . Some try to go down several floors in the hope of deliverance from certain death but there is no difference because these fuel-air explosives will completely destroy a house.*¹⁴⁷

A fuel-air explosive (FAE) device consists of a container of fuel and two separate explosive charges. When the first explosive charge detonates after the munition is dropped or fired, the container opens and disperses the fuel in a cloud that mixes with atmospheric oxygen. The cloud can disperse and flow around objects. When the second charge ignites the cloud, an enormous blast wave is created, which can destroy reinforced buildings and equipment and results in horrific injuries.¹⁴⁸

Volumetric weapons like fuel-air explosives can be particularly devastating in enclosed spaces, such as a basement or cave. These structures are meant to protect people from shrapnel and secondary injuries. But the cloud produced by a volumetric weapon explosive can emanate a certain distance before detonating and create a vacuum, killing occupants that could have been kept safe from the effects of a conventional explosive weapon.¹⁴⁹ The reported use of this weapon demonstrates that the Syrian regime and its allies

143 CIVIC interview with Abduljassim from Aleppo, Turkey, September 18, 2015.

144 CIVIC interviews with Syrian civilians, November-December 2015.

145 CIVIC interview, Deraa via Skype, December 2015.

146 United Nations Human Rights Council, “Oral Update of the Independent International Commission of Inquiry on the Syrian Arab Republic,” Human Rights Council, Twenty Ninth session, Agenda item 4, Human rights situations that require the Council’s attention, A/HRC/29/CRP.3, June 23, 2015; and CIVIC interviews with Syrian civilians from September-December 2015.

147 CIVIC interview with civilian (name withheld) in Deraa via Skype, December 30, 2015.

148 Human Rights Watch, *Backgrounder on Russian Fuel Air Explosives (“Vacuum Bombs”)*, February 1, 2000, <https://www.hrw.org/report/2000/02/01/backgrounder-russian-fuel-air-explosives-vacuum-bombs>.

149 Torie Rose DeGhett, “A New Kind of Bomb Is Being Used in Syria and It’s a Humanitarian Nightmare,” *Vice News*, August 28, 2015, <https://news.vice.com/article/a-new-kind-of-bomb-is-being-used-in-syria-and-its-a-humanitarian-nightmare>.

will continue to find ways to counter civilians' survival strategies. A cessation of hostilities should provide humanitarian actors with the space to continue adapting strategies to new phases of conflict.

While the attacks struck any place at any time, Syrians' experience made them more cautious with regards to certain buildings or gathering places that tend to be targeted. Rasha, from the Idlib countryside, told CIVIC that gathering in larger numbers in locations like a public marketplace is not allowed anymore in her area because they became targets. Abdulhakim, from Idlib countryside, said, "Civilians close the doors, go down to the first floor or go to open land because they [Syrian regime aircraft] only strike buildings or where there are people. They do not strike areas without civilians."¹⁵⁰

Secondary blast injuries caused by fragments, such as flying glass, is a major cause of injury and death in an explosion as they can travel over a mile away from the blast site. In every governorate where CIVIC interviewed (except for Tartous and central Damascus, which are government controlled areas), rather than replace windows shattered by the usage of explosive weapons in the conflict, civilians had replaced glass with more pliable material like nylon or plastic sheeting.

There needs to be locally led planning and development of these individual strategies on a secure platform, online and face to face, so that civilians facing similar obstacles to survival can share lessons identified

and better protect themselves, their families, and communities.¹⁵¹

With dedicated funding, NGOs could facilitate information sharing with experts to fine tune existing strategies to protect civilians and to develop new ones as different challenges arise. They can then incorporate lessons learned into the physical protection of civilians and civilian objects for humanitarian assistance projects.

We have seen a large number of massacres against civilians when helicopters targeted shelters with explosive barrels or rockets from warplanes

¹⁵⁰ CIVIC civilian interview with Abdulhakim from the Idlib countryside, Antakya, November 11, 2015.

¹⁵¹ CIVIC uncovered additional protection and resilience strategies, which were not included in this report due to security concerns but these methods also need to be further researched and supported.



Image by Khalil Ashawi

Syrian Civil Defense volunteer collects unexploded cluster bombs dropped by Russian warplanes on southern Idlib, where a bombing killed more than nine people and injuring dozens. SCD collects cluster bombs and detonates them in isolated areas to avoid harm to civilians and children playing nearby (2015).

CONCLUSION

“There were rockets and missiles from the regime. The situation is really bad. The kids are so scared and traumatized by the shelling. They constantly look for the planes from the balcony. There is no stability or safety. For four days, he [Bashar al Assad] dropped the barrels and there were many martyrs. ISIS was very close too. We left for my children’s state of mind. They do not have a future there [Aleppo].”¹⁵² – Mawiya, from the Aleppo countryside.

Civilian protection needs to be a priority for all actors and stakeholders in Syria. Targeting civilians is a flagrant violation of international law. In terms of providing physical safety from indiscriminate and advanced weapons, there are no easy answers for civilians on the ground, humanitarian groups, and aid providers in Syria. But more can be done now and in the future to make civilians in country and those returning home feel safer during a tenuous and unstable period. Governments and donors must do better to protect civilians and to empower civilians to protect themselves. International and local NGOs need further support to undertake protection work inside Syria. As the diplomatic process becomes increasingly disconnected from the reality on the ground, it is unlikely that the violence in Syria will end quickly even if a peace deal is reached.

The gap in physical protection will be difficult to fill. One of the most obvious reasons is the near impossibility for international NGO workers to access much of the country. Another major factor is the lack of a single, specific entity tasked with physical protection of Syrians from bombardment (e.g., reinforcement of hospitals, early warning systems, evacuations plans, and shelters). Protection in the UN cluster system focuses on protection in terms of sexual and gender based violence, child recruitment and exploitation. However, there is not a focus on increasing the physical protection of civilians and vital civilian infrastructure from live fire, shelling, and airstrikes. Developing evacuation plans, safety points, and early warning systems should be a priority, to give Syrians more control over their safety and lives.

¹⁵² CIVIC interview with Mawiya in Kilis, Turkey, September 22, 2015.

More activities and responsibilities—and training—should be given to Syrians on the ground. Outside of Syria, INGOs should assign experts in physical protection the task of reviewing projects and identifying ways to better protect civilians and civilian objects.

As the diplomatic process becomes increasingly disconnected from the reality on the ground, it is unlikely that the violence in Syria will end quickly even if a peace deal is reached.

It may take more time to determine what works best and provide risk education for Syrians as new survival techniques are created. Syrians have already developed an impressive array of self-protection mechanisms from walkie-talkies to intercept Syrian and Russian military communications, to internet-based phone applications like Zello. The extra step is needed to identify what works, develop those methods, and share that information across hard hit areas in Syria in order to save lives.

Clearly, merely supporting survival strategies is not an alternative to peace.

Every Syrian interviewed pleaded that the

international community stop the planes and the missiles. Those on the ground are relieved that the violence has ebbed significantly for the first time in five years but most are realistic that there is a long road ahead in Syria and dangers are ever present. In answer to a question about the cessation of hostilities and the future, Abdel-Aziz al-Hamza cofounder and spokesman of the group Raqqa is Being Slaughtered Silently, said, “It is better than nothing. Maybe 20 will die daily instead of 100 but there are a lot of areas where there are no ISIS or Nusra members that are still being bombed. It will become worse than it is now.”¹⁵³ Until the violence ends with a lasting peace settlement, the humanitarian community and donors have to step up and protect the civilians on the ground for the present and future stability of Syria, the region, and the world.

153 CIVIC conversation with Abdel-Aziz al-Hamza, April 1, 2016.

RECOGNIZE. PREVENT. PROTECT. AMEND.

ABOUT THE REPORT

This report explores the experiences of civilians and humanitarian actors living through the conflict in Syria. The goal is to better understand how civilians, humanitarians, medical professionals, and others have tried to protect themselves from explosive weapons and artillery so that the international community can learn from them and better support those efforts. Understanding that civilians will not be safe from bombardment until there is a just peace, we analyze ways that the international community can support and enhance practical and locally informed survival strategies and save lives.

ABOUT CENTER FOR CIVILIANS IN CONFLICT

Center for Civilians in Conflict (CIVIC) works to improve protection for civilians caught in conflicts around the world. We call on and advise international organizations, governments, militaries, and armed non-state actors to adopt and implement policies to prevent civilian harm. When civilians are harmed, we advocate the provision of amends and post-harm assistance. We bring the voices of civilians themselves to those making decisions affecting their lives.

The organization was founded as Campaign for Innocent Victims in Conflict in 2003 by Marla Ruzicka, a courageous humanitarian killed by a suicide bomber in 2005 while advocating for Iraqi families.

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