



The White Helmets

LIKE A THUNDERBOLT:

THE DELIBERATE TARGETING OF CIVILIANS
WITH LASER-GUIDED WEAPONS IN SYRIA



Introduction

In 2021, the White Helmets - Syria Civil Defence witnessed a new trend in attacks on civilians in Northwest Syria. We documented 63 attacks using laser-guided weapons called Krasnopol shells. This is the first time in the ten-year long conflict that the use of this weapon has been recorded by the White Helmets teams.

This weapon is deadly: while only 4% of the attacks we witnessed used Krasnopol shells, they resulted in 20% of all civilian deaths caused by military attacks in 2021.

These Russian-made shells appear to be fired by the Assad Regime with the support of an external designator, such as a ground contingent or via Unmanned Aerial Vehicles, or drone.¹

The White Helmets is a humanitarian organisation composed of almost 3,000 civilian volunteers dedicated to helping communities prepare for, respond to, and rebuild after attacks. In our role as first responders, we have also become the primary witnesses to war crimes and crimes against humanity in Syria. We are the first on the scene after attacks take place and document what we witness to support future accountability and justice efforts for Syrians.

The targeting of civilians and civilian infrastructure in the Northwest has a devastating impact, increasing the daily suffering of the 4.2 million people living in the region. Civilians are being continually displaced by the Regime and Russia's attacks. The Northwest hosts 2.8 million displaced people, of whom 1.7 million live in temporary camps. Ninety percent of the population are food insecure, with a strong reliance on humanitarian aid. A recent wave of Covid-19 overwhelmed the already stretched health system and the population struggles to access basic services like primary and emergency healthcare.

This report provides information about attacks on this population using Krasnopol shells and the impact of these shells on civilians and civilian infrastructure.

¹ See for example, investigation by Syrian Archive, 30 March 2021, "Guided artillery shells for the Al-Atarib Surgical Hospital (Al Magahra) out of service", available at <https://syrianarchive.org/en/investigations/AlMagahraHospital>

Methodology

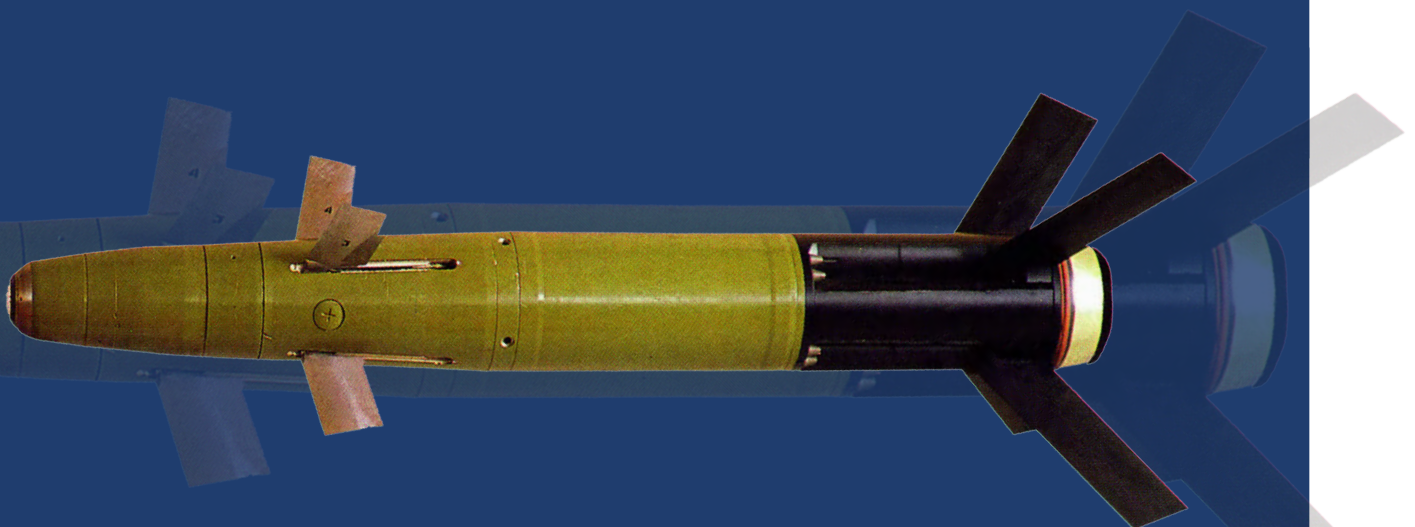
This report is based on a number of data sources. The primary source is the White Helmets' own incident reports, which record the date, location, type of target, type of attacks and projectile, suspected perpetrator and the number of victims of each attack that we respond to. The report also relies on photos taken by White Helmets volunteers, on statements from witnesses, including White Helmets volunteers, as well as additional desk research.

About the Krasnopol Shell

Although the Krasnopol shell was developed in the 1980s and there have been reports of its use in Syria in the past,² 2021 was the first year that the White Helmets have witnessed and been able to document its use.

Krasnopol is a Russian-made, semi-automatic, laser-guided, fin-stabilized, explosive projectile. It is produced with 155 mm and 157 mm caliber to be fired from artillery howitzers. After launch, the projectile communicates with an external laser designator - a ground contingent near to the target or a drone. This designator illuminates the target with a laser and sends signals to guide the shell's path, up to a range of 7km. This is the equivalent effect of shining a torch light on the target that the shell can find with up to 90% accuracy. The shell was originally designed to counter tanks and penetrate hard fortifications.³

We are not able to conclude from the evidence available that the external designator is a drone. However, the preponderance of drones in the airspace above the locations of attacks suggests that, at the very least, drones communicate the coordinates of a target. We do not have any evidence regarding the ownership of the drones.



²Ibid.

³Military Today, "Krasnopol", available at <http://www.military-today.com/artillery/krasnopol.htm>.

2K25M Krasnopol

PROJECTILE FRONT:

The front of the projectile contains two main parts as follows:

1. A mechanical fuse (timer) that maintains the integrity of the laser lens in the front during the firing of the projectile from the barrel. It automatically separates from the projectile body as it approaches the target.
2. The laser lens: Sends laser signals towards the target. This is linked with the military base, which sends information to correct the path until the shell hits its target.

FRONT MOUNTING FINS:

There are four fins located in the central part of the shell's body to maintain the balance of the shell in the air until it reaches the target.

PROJECTILE BODY:

Also known as the warhead. It weighs about 20 kg, and it contains TNT explosive material. The weight of the explosive material is about 6.5 kg in old models and 11 kg in modern models.

THE TAIL:

The back part of the shell is composed of three parts:

1. Four fins to maintain balance and direct the projectile until it reaches the target. These fins are larger than the front mounting fins.
2. The missile engine that pushes the projectile towards the target after launching it from the barrel.
3. The guide ring, which is behind the fins.



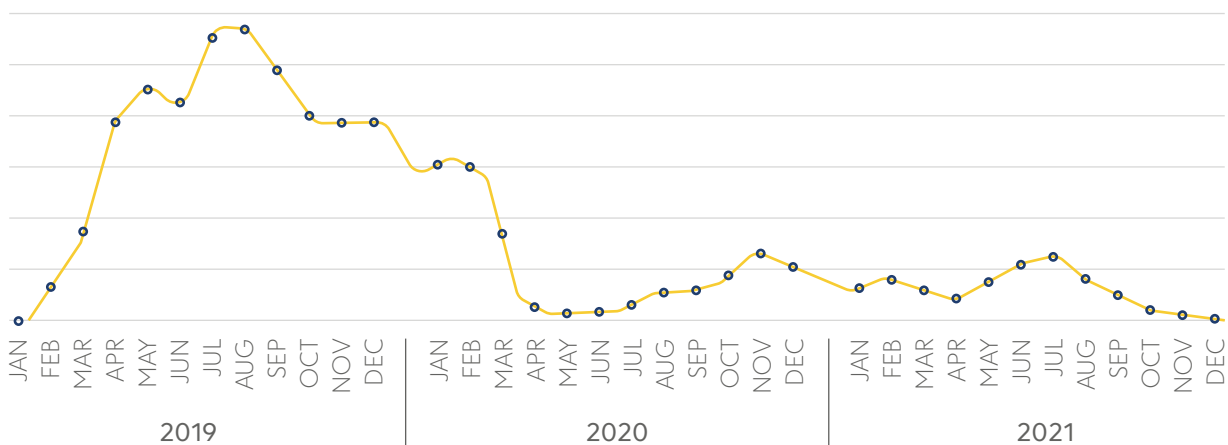
No place to hide: the use of Krasnopol shells against civilians

The current ceasefire between Russia and Turkey has led to an overall reduction in aerial and artillery attacks in Northwest Syria. We have seen aerial attacks decrease by 90% in comparison to 2019, and artillery shelling by 75%. However, attacks have not stopped completely, and we responded to over 1,500 attacks in 2021, which used over 7,000 projectiles. The Assad Regime is the suspected perpetrator of 71% of these attacks. The Krasnopol is one of many types of shells used to attack civilians via artillery shelling.

The White Helmets have documented the use of Krasnopol shells in 63 attacks in 2021. As the first responders to attacks, we have gathered video and photographic evidence, as well as first-hand testimonies. We also analyze the remnants of the shells left on attack sites.

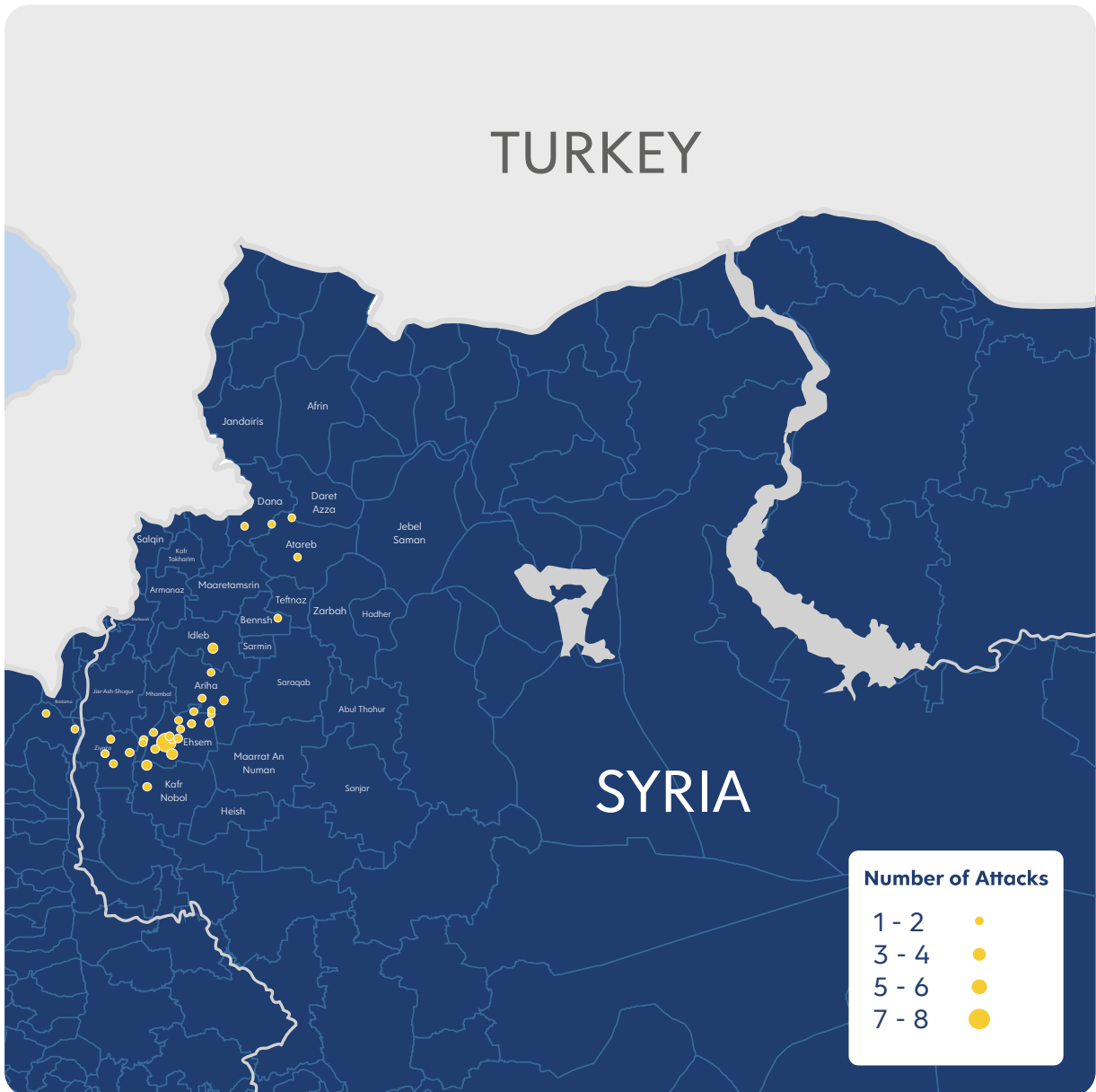


Overall levels of artillery shelling over time



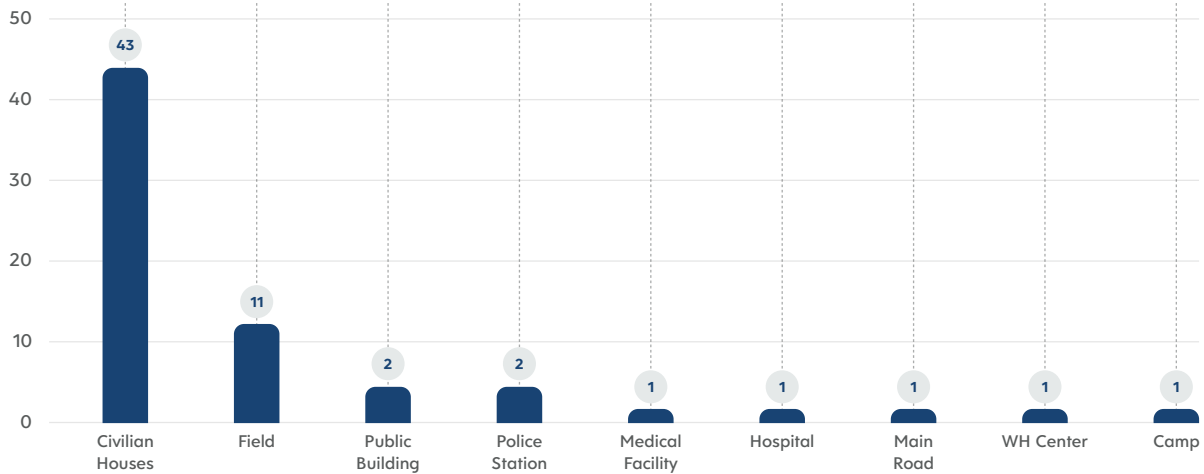
⁴ <https://www.youtube.com/watch?v=SY4zrx3pl3k>

Attacks by Krasnopol shells documented by White Helmets



The attacks targeted vital areas close to the front lines between regime-controlled and non-regime-controlled areas. This region includes a large number of civilians who returned to these areas after the ceasefire. The largest number of attacks have targeted Ablin village in Idlib countryside, which is home to almost 2,200 individuals. The targets of these attacks have included civilian infrastructure protected by International Humanitarian Law: a majority of the attacks (43) targeted civilian homes; 11 hit agricultural fields; attacks also targeted IDP camps, a hospital, a medical point and a White Helmets centre.

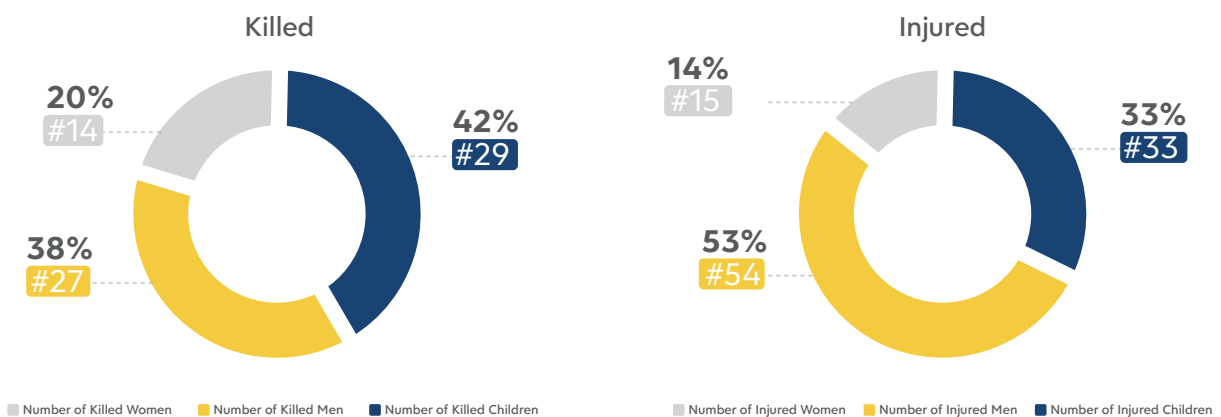
The attacks according to targeted places



This type of munition poses a great danger to civilians. The weapon is highly destructive and can penetrate walls and severely damage buildings: most of the buildings that were targeted by Krasnopol shells were completely destroyed.

The Krasnopol attacks represented just 4% of documented attacks but resulted in just over 20 percent of all civilian deaths and 10 percent of injuries documented in 2021.

70 people were killed and 102 injured by attacks using Krasnopol shells in 2021. Children have made up a significant number of the overall victims, with 29 killed and 33 injured. The victims also include two White Helmets volunteers, who were killed during two separate attacks.



The trend is additionally concerning because artillery shelling is not covered by the White Helmets' civilian early warning system. The system, called "Sentry" or "Al-Rased", was created by the White Helmets to alert the population of potential airstrikes by following the movements of airplanes. Since Krasnopol shells are launched by artillery from the ground, the early warning system cannot account for the attacks. Civilians have been forcibly displaced to other areas of the Northwest in search of safety as a result.

Impunity for war crimes and the use of Syria as a testing ground

The use of the Krasnopol - a precision guided weapon system - is significant because the use of such targeted weapons should minimise civilian casualties. Instead, eyewitness accounts from White Helmets volunteers indicate that they appear to have been used to directly target civilians and civilian homes and infrastructure. The precise accuracy of the shell and the requirement for an external designator to guide the shell to its target means that someone has observed the civilian target before and during a strike. More than one strike on the same target indicates that the target continues to be observed after the initial attack takes place.

In the past, the Assad Regime and its allies have used weapons whose impact was more difficult to control - such as barrel bombs, cluster munitions and chemical weapons. The use of such indiscriminate weapons in heavily populated areas has caused thousands of devastating civilian casualties. They were used in heavily populated areas in a way that made no distinction between military and civilian targets.

There has been no accountability to date for the disproportionate and indiscriminate use of weapons against civilians and civilian infrastructure in Syria. This impunity has emboldened the Regime and its allies, Russia and Iran, to experiment with new weapons in civilian areas.⁵ Russian Defense Minister Sergey Shoigu has confirmed that all of Russia's latest weapons systems are being tested in Syria to support Assad's operations against civilians in non-regime-controlled areas. Under international law governing armed conflict, the Syrian regime has an absolute obligation to protect civilians. At all times, all feasible precautions must be taken to avoid or minimise the loss of civilian life, and damage to civilian property.

The use of laser-guided shells against civilians is a disturbing new trend for 2021. The pattern of its use - targeting civilian homes, medical centres, and agriculture - demonstrates that the regime intends to cause harm to civilians. Syria is being used as a test of the will of the international community to prevent and prosecute atrocities against civilians. The White Helmets wish to sound the alarm: civilians are being targeted and killed with accuracy and intent. The international community must stand up against impunity and protect civilians and the laws that regulate the use of force.

Bearing witness to the civilian impact of Krasnopol shells

This section of the report presents three case studies considering the impact of the Krasnopol shell on the White Helmets, on medical facilities and on civilian homes, with the support of witness testimonies.

⁵ All of Russia's latest weapons tested in Syria, says Defense Chief", TASS Russian News Agency, 30 August, 2021, available at <https://tass.com/defense/1331715>.

White Helmets volunteers under attack

This year, two separate Krasnopol attacks have killed two White Helmets volunteers and injured seven others.

One attack targeted a White Helmets team while responding to an attack in Sarja village on July 17, 2021. A White Helmets media volunteer was killed, and two others were injured. The attack also killed five civilians, including three children and a woman, while wounding four others. The Regime's forces used a double-tap in this instance, re-attacking a targeted area after leaving a sufficient period of time for paramedics and rescuers to start to rescue the victims of the first strike. This type of attack aims to increase the number of victims, specifically targeting those providing emergency humanitarian and medical services.

The second attack targeted the White Helmets Centre in Qastun village in Hama Western countryside on June 19, 2021, killing one volunteer and injuring five. The Centre was rendered out of service by the attack, many vehicles were destroyed, and 15 communities lost access to services.



Witness testimony of the attack on Qastun White Helmets Centre

“Two highly-explosive Krasnopol artillery shells targeted Qastun Centre at 8 a.m. The scene was horrific, as if the center flipped over us. The rubble was falling on my back and head. I recalled the times I had worked to rescue civilians from under the rubble. I was afraid to remain trapped in this place. I rushed out from under the rubble. Although I was injured, I rescued one of my colleagues who was seriously injured and other civilians.

After a couple of minutes, a third shell targeted the center, injuring another volunteer. I transferred him by motorbike to a safe place nearby, where he was taken to a hospital to receive medical treatment.

After that the White Helmets supporting team of paramedics arrived and transferred me to Al-Jisr Hospital to remove shrapnel from my body. Afterwards, I knew that my colleague Daham had passed away.

It was like a thunderbolt and life stopped for a moment.”

Witness testimony by Hassan, White Helmets Volunteer at Qastun Centre in Idlib countryside, 30 June 2021.



A view from the ground: Constant fear of double-tap attacks

“Krasnopol artillery shells targeted civilian homes in Ablin village on the morning of 22 July, 2021.

Upon receiving a distress call, we took bikes towards the targeted location to avoid being targeted in a double-tap attack. The scene was terrible, the smell of blood prevailed, and we saw pieces of the bodies of lifeless children. We heard voices from under the rubble, so we called for the rescue car to use the equipment to get the injured out from under the rubble. The car stopped for a short time so that they were not detected by reconnaissance aircraft. We knew that there were two girls under the rubble; Hanadi, 14, and Doaa, 13. The two girls were asking for help, screaming, “help us for God’s sake!”. The scene was very scary and there was nothing except the sound of reconnaissance aircraft. While we were working amid the rubble, we heard a civilian shouting, warning us of a second attack, “Civil Defence, leave this place!”. Our first instinct was to run, according to White Helmets’ safety rules. We ran two meters, while my eyes were still looking at the girls under the rubble. I felt afraid that their destiny may be the same as their fellow children whose bodies were in pieces on the ground.

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The girls screamed again, “for God’s sake, do not leave us!”.

I imagined that the girls were my daughters. So, my colleague and I decided to stay, and I shouted, “we will not leave you alone and we will rescue you before another attack”.

Luckily, we managed to rescue them before another attack. And we all left the attacked place safe and sound.

Witness testimony by White Helmets volunteer, Hussam, 24 July 2021, Ablin.

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Attacks on healthcare facilities

Syrian Regime forces targeted Al-Atareb Hospital in Aleppo western countryside on March 21, 2021, killing nine civilians, including one woman and two children. 14 other civilians were injured, including five medical staff. The hospital itself was based underground to protect it from airstrikes.

According to Physicians for Human Rights “by March 2021, the al-Atareb health care system, supported by Syrian American Medical Society (SAMS), was comprised of two separate facilities and a vaccination clinic, and served a regional population of 182,358 people, 40.4 percent of whom are internally displaced persons (IDPs).”⁶ Over 22,000 people lived in Al-Atareb at this time, with almost 50% of the population internally displaced. As a result of the attack, the hospital suspended all services for two weeks, vaccination and primary health care were closed for a week and even after the hospital reopened, elective care was not restored for a week due to ongoing security concerns.⁷

The hospital remained suspended for

2 WEEKS

as a result of the attack



⁶ Physicians for Human Rights, July 2021

⁷ Physicians for Human Rights, July 2021, “No place is safe for healthcare: The attack on Syria’s Al-Atereb hospital”, available at <https://bit.ly/35KOa8X>



In another attack, Regime forces used Krasnopol shells to target a medical point in Mareian village in Idlib southern countryside on September 8, 2021. The attack killed one woman and injured her child. The impact of the shelling completely destroyed the medical point, rendering it out of service.



Civilian homes are not safe

The White Helmets have responded to 43 Krasnopol shell attacks on civilian homes. The toll of these attacks is heavy. For example, Syrian Regime forces targeted civilian homes in Ablin village, killing a family composed of a man, a woman and three children, on July 3, 2021.



In another attack, Regime forces killed three children, their mother, and another child, while injuring a young man and a child in Balshon in Idlib southern countryside on August 19, 2021.



A white Helmets volunteer and his wife were injured, and his two daughters were killed in an attack that targeted their home in Balyun village in Idlib countryside on July 07, 2021.

White Helmets witness: responding to Krasnopol attacks

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“I was with a paramedic at Bennis Stadium during a football match. At about ten o'clock, I heard shelling, and I saw with my own eyes the targeted location on the outskirts of Bennis. I immediately contacted the White Helmets team leader in my area and told him that I had seen the strike. He told me to go to the site with the paramedic. We reach the targeted place within less than two minutes.

Civilians were carrying two wounded boys. We took them by ambulance to Bennis Hospital and went back to the site of the strike. Meanwhile, the second ambulance team and other civilians retrieved a little girl called Nour, and the rest of the injured. I took Nour to Bennis Hospital, her injury was serious. I returned to the targeted place for the third time. I took a man with an injured leg. The situation was very difficult due to the large number of injured, and the scene was terrifying due to the great level of destruction.”

Later, I knew through White Helmets specialized teams that the attack was carried out with a Krasnopol laser-guided shell.

Witness testimony by Ahmed, a White Helmets volunteer driver at the Bennis Center, Taftanaz Sector, 2 December 2021

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Civilian eye-witness account of a Krasnopol attack

“My house was targeted at 11 pm on 17 July 2021, almost two days before Eid Al-Adha. I was at home with my children. We heard the echo of a shell that targeted Ehem village, and we learned later that it massacred civilians there. We felt afraid and we did not know where to go.

Suddenly, we heard a second bombardment, and I didn't know what happened. My daughter was screaming, ‘Daddy!’, I came out and I found my two daughters and my mother injured on the balcony. They were under the fallen walls of my house. We shouted and called for the help of the White Helmets volunteers. The White Helmets volunteers could not use their cars due to the presence of reconnaissance aircraft. They rescued my daughters using a motorbike.

I will never forget that day. We miraculously escaped death. When the shell landed, I expected that we would all die, and no one would survive.”

Witness testimony by Mahmoud, a civilian from Balyun town in Jabal Al-Zawiya in Idlib countryside, 16 August 2021

Recommendations

Governments should:

1. Request the establishment of a special investigation on the use of the Krasnopol missile and other advanced weapons in Syria by the United Nations Independent International Committee of Inquiry on the Syrian Arab Republic.
2. Place sanctions on any party facilitating the sale of Krasnopol weapons systems or component parts to the Assad Regime and its allies.
3. Publicly condemn the intentional targeting of civilians and civilian objects in all available diplomatic arenas.
4. Push back against the normalisation of relations with the Assad Regime.
5. Work through all available legal channels – including international treaties, universal jurisdiction and domestic legal proceedings – to end impunity and bring the perpetrators of war crimes and crimes against humanity in Syria to justice.
6. Ensure that the interests and voices of Syrians are represented in diplomatic efforts to find a peaceful solution to the conflict, in line with United Nations Resolution 2254.

Conclusion

The evidence gathered from our incident reports and the testimonies from eyewitnesses on the ground, including White Helmet volunteers, points to an alarming pattern of increasingly lethal and precise attacks on civilians by the Syrian regime, using the Krasnopol weapons system. Rather than using precision-guided weapons to avoid civilian casualties, these weapons have been used to carry out more than 60 attacks that have killed and injured a disproportionate number of civilians. This behaviour displays a flagrant disregard for human life and for obligations under international humanitarian law to ensure the protection of civilians.



The white Helmets



www.whitehelmets.org