



Calculated Harm: Attacks on Emergency Responders in Ukraine



**DEDICATED
TO UKRAINIAN
EMERGENCY
RESPONDERS
WHO LIVED
AND DIED
RESCUING
OTHERS**

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Abbreviations

AFU	Armed Forces of Ukraine
AP (I)	Additional Protocol I to the Geneva Conventions
AWSD	Aid Worker Security Database
ELINT	electronic intelligence
EW	electronic warfare
FAB	high-capacity aerial bomb
FPV	first-person view
HPP	hydroelectric power plant
HTS	Hay'at Tahrir al-Sham
IHL	international humanitarian law
MAO	mine action operators
MD	Main Directorate of the State Emergency Service of Ukraine
MES	Ministry of Civil Defense, Emergencies and Disaster Relief of the Russian Federation
MIA	Ministry of Internal Affairs of Ukraine
MLRS	multiple launch rocket system
NATO	North Atlantic Treaty Organization
NGO	nongovernmental organization
OMDK	Telegram channel "Ot Mariupolia do Karpat" (Ru. "From Mariupol to the Carpathians")
OSINT	open-source intelligence
PPE	personal protective equipment
PTSD	post-traumatic stress disorder
SCD	Syrian Civil Defense
SES	State Emergency Service of Ukraine
UAV	unmanned aerial vehicle

EXECUTIVE SUMMARY

Since the beginning of the full-scale invasion in 2022, Russian forces have repeatedly killed, injured, and targeted emergency responders in Ukraine while they carried out civil defense tasks. Evidence collected and analyzed by Truth Hounds suggests a sustained pattern, not a series of isolated accidents or incidental battlefield harm. These attacks have hit hardest in frontline communities but they have also occurred in other cities relatively far from the front, weakening civilian protection across a wide part of the country.

This Truth Hounds report analyzes Russian attacks on emergency responders in Ukraine from February 24, 2022 to October 31, 2025. It identifies recurring patterns of such attacks in time, geography and weapon type, examines possible rationales, and assesses the implications for emergency response efforts in Ukraine. It also considers possible legal characterizations of such attacks under international humanitarian law and, where relevant, the Rome Statute.

The findings are based on systematic open sources monitoring, 21 semi-structured interviews conducted during field missions, and official statistical

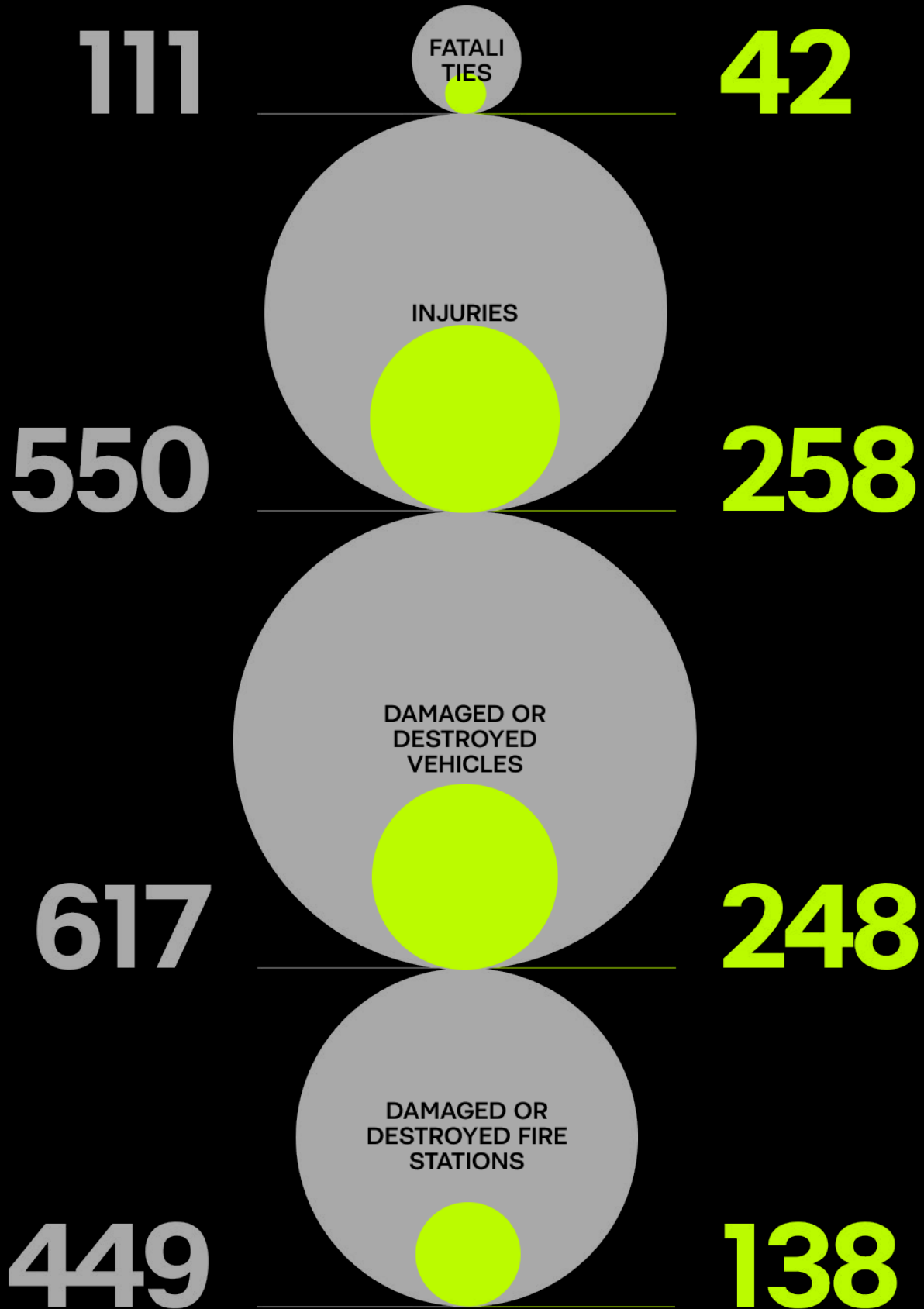
data provided by the **State Emergency Service of Ukraine (SES)**. In addition, we publish four datasets designed to ensure transparency and enable further analysis.

Truth Hounds has identified 401 incidents in the study period in which attacks killed or injured emergency responders, damaged fire stations or emergency operations vehicles, or forced responders to suspend operations due to repeat attacks. These incidents caused at least 42 deaths and 258 injuries among emergency responders, and damaged or destroyed at least 248 emergency operations vehicles and 138 fire stations. Official data provided by the SES are significantly higher: 111 deaths, 550 injuries, 617 damaged or destroyed vehicles, and 449 affected fire stations and other SES facilities during the same period.

The difference between our monitoring data and official SES figures suggests the actual scale of attacks likely exceeds what is captured in open sources and may help establish approximate ranges for the overall scope of incidents examined in this study.



Photo:
Pavlo Petrov



We have grounds to believe that the actual scale of the consequences of armed attacks on emergency responders is closer to and may even exceed the figures reported by the SES. Truth Hounds data draws primarily on open sources.

2022

24



2023

59



2024

103



2025

215



THE REPORT'S FIRST CHAPTER shows that attacks on emergency responders increased over time and reached their highest recorded number in 2025. Most incidents occurred in frontline areas, especially in Donetsk, Kharkiv, Dnipropetrovsk, and Kherson Oblasts. At the same time, the attacks did not remain confined to those areas. They also reached cities farther from the front, showing that this pattern has a broad geographical reach.

The report also finds a major shift in weapon use. Drones became the dominant weapon in incidents affecting emergency responders, and their use rose sharply in 2024 and 2025. Our data indicates that in 2025 there were 138 reported drone-related attacks—almost 3 times higher than in 2024 and more than 15 times higher than in 2023. That shift matters because many drones allow operators to observe an attack site in real time. Emergency responders wear distinctive uniforms and operate clearly marked vehicles that visibly identify them as emergency services personnel. Therefore, attackers’ use of drones with real time video feeds strengthens the inference that emergency responders, at least in some cases, came under intentional attack.

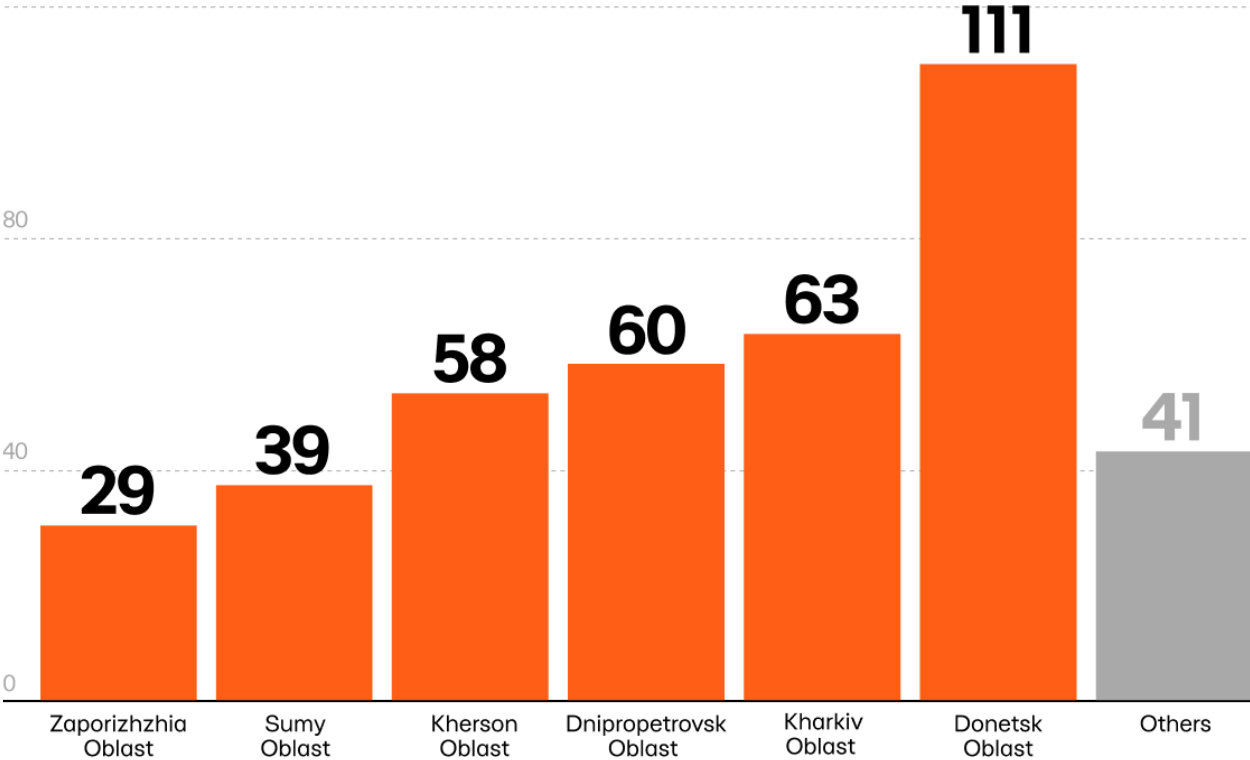


“At the beginning of the war, the number of strikes was significantly lower, whereas now damage to equipment by FPV drones—in other words, the deliberate destruction of fire trucks—is observed almost daily. Reports of repeat shelling or FPV-drone strikes during firefighting operations are received virtually every day. A similar trend can be observed with respect to facilities: the number of double-tap strikes against them has also increased,” **Viktor Likanov**, Deputy Director of the Department of Resource Support and Head of the Directorate for Construction and Operation of Mobile Assets of the SES, told Truth Hounds in an interview.¹

THE SECOND CHAPTER identifies recurring types of attacks, primarily double-tap strikes and attacks on fire stations, but also drone “hunting” of emergency operations vehicles, attacks on evacuation and pyrotechnic teams, and attacks during large-scale environmental shocks.

¹Truth Hounds interview with Viktor Likanov (September 10, 2025).

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Distribution of incidents by oblast. Source: Truth Hounds.

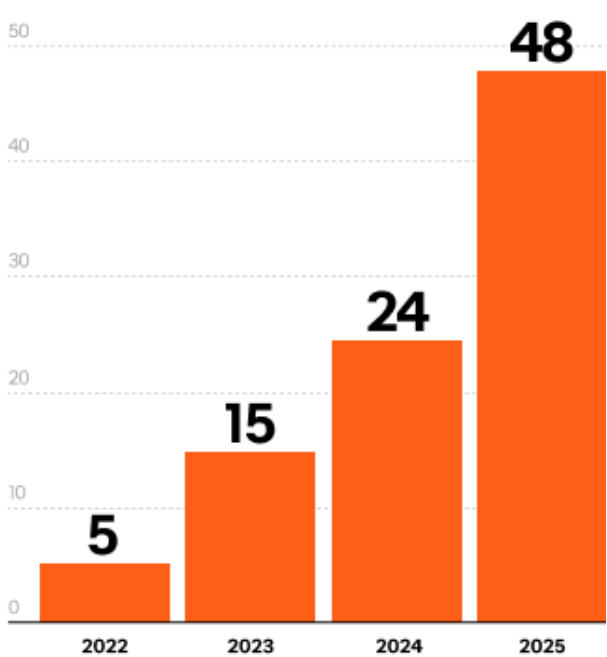
Double-tap strikes are a military tactic where the first strike hits a particular target and subsequent ones are directed at emergency responders arriving at the scene. Truth Hounds identified 200 incidents that bore the hallmarks of double-tap strikes and verified 92, mainly through open-source analysis.

Those verified cases caused at least 20 deaths and 108 injuries among emergency responders and damaged or destroyed at least 76 emergency vehicles and 3 civil defense buildings. In more than half of those verified cases, drones carried out the second strike. In most cases, an initial strike hit or landed near a civilian object, and responders who arrived to help then faced the follow-up strike. These attacks do more than kill and injure. They interrupt rescue work, delay debris removal, deepen fear among civilians, and force responders to work under the constant threat of another hit. In such cases, these types of attacks function as a tool of terror, prompting fear and hopelessness.

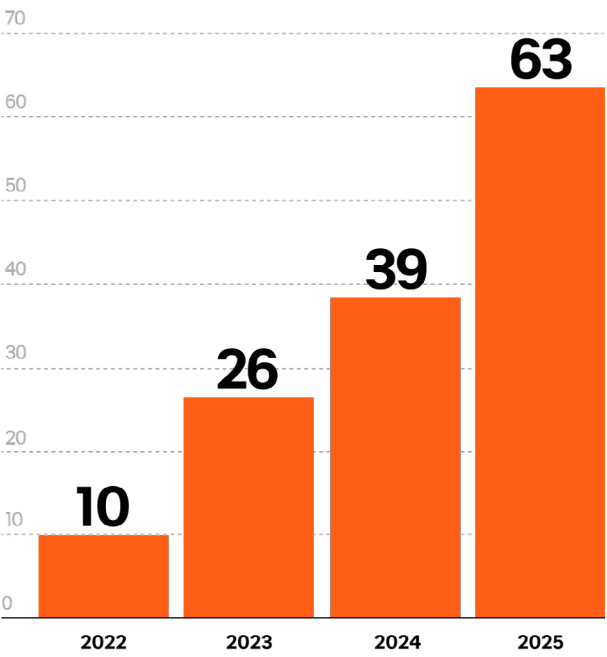
The same chapter also identifies attacks on fire stations as a second major pattern. Fire stations are critical operational hubs and vital spaces for civilian life in conflict. Truth Hounds documented 138 incidents that damaged or destroyed fire stations, while SES data indicate a much larger

overall toll. Most of these attacks occurred close to the frontline, and some stations were hit repeatedly. In Nikopol alone, we recorded more than ten such incidents. In most analyzed cases, researchers did not identify a stationary military facility within 300 meters of the station, which supports an inference that the stations themselves may have been the intended targets. These attacks matter because when strikes damage or destroy fire stations, they degrade emergency capacity over time, weaken local resilience, and leave civilian communities more vulnerable to both wartime and ordinary emergencies. Such attacks may also exacerbate forced displacement, and, in combination with other measures, may be used to pressure leadership into making political or military concessions.

The report finds that attacks on emergency responders in Ukraine may amount to war crimes, including attacks on civilians and, in certain circumstances, attacks on civilian objects under the Rome Statute. It also argues that some attacks may violate the prohibition on acts or threats of violence whose primary purpose is to spread terror among the civilian population under Article 51(2) of Additional Protocol I. We recognize that any final criminal qualification depends on the facts and evidence in each case.



The number of verified double-tap strikes.
Source: Truth Hounds.



Distribution of incidents resulting in the damage or destruction of fire stations by year. Source: Truth Hounds.



CHAPTER 3 examines how Russian and pro-Russian sources disparage and vilify Ukrainian emergency responders. Truth Hounds identified 169 posts on 26 pro-Russian Telegram channels that commented on Ukrainian emergency responders. Many posts threatened responders directly. Others portrayed the SES and its infrastructure as military targets, accused responders of working with foreign fighters or NATO, or used dehumanizing language and calls for violence. Official Russian sources largely stayed silent about attacks on emergency responders and their losses. In that context, these Telegram channels offer important insight into a discourse that may help explain or reinforce the targeting pattern documented elsewhere in the report.

THE REPORT'S LAST CHAPTER shows how these attacks have reshaped emergency work in Ukraine. In some frontline communities, war-related calls now dominate daily operations. Emergency responders must change routes, suspend work, shelter during operations, and rely more heavily on jamming systems, drone detectors, armored vehicles, and robotic tools. These burdens can delay rescue, prolong fires, and leave civilians trapped for longer durations. The attacks also impose serious physical and psychological costs. Some responders have suffered permanent injuries or lost the ability to continue working. Many others live with sustained stress, anxiety, and fear linked to war itself and to the risk of being killed while trying to save others.

The data clearly shows that Russian attacks on emergency responders in Ukraine have formed a sustained pattern that harms those who carry out civil defense, disrupts rescue operations, and weakens civilian protection. Improved protection measures may have reduced the lethality of some attacks, but also can slow response time and increase the burden on emergency responders while conducting what is already extremely challenging work emotionally and physically. Most of all, the increase in the frequency of attacks on emergency responders over the last three years points to a deeply troubling trajectory in the war. Attacks on emergency responders in this conflict demand urgent response from the international community, including in the field of criminal investigation and accountability.



VIKTORIYA
KRYVOLAPCHUK

co-founder of the Brave Minds project for psychological assistance to the SES, told Truth Hounds.²

² Truth Hounds interview with Viktoriya Kryvolapchuk (January 26, 2026).

“
Every day feels like it might
be your last. [...] Emergency
responders face this every
day.”

Photo:
Pavlo Petrov

RECOMMENDATIONS

To the Government of Ukraine

- Promote and support the development of technological solutions aimed at increasing occupational safety for emergency responders.
- Ensure continuous and effective interagency coordination with regard to the documentation of strikes against emergency responders and the use of the resulting data in criminal proceedings.
- Support and expand state programs that finance medical treatment, rehabilitation, mental health and psychosocial support for emergency responders, health insurance coverage, and ensure appropriate and timely payments to the families of fallen emergency responders.
- Establish sustainable mechanisms for integrating injured emergency responders and civil defense veterans into training, analytical, and managerial positions within the civil protection service.
- Expand mobilization reservations for local and volunteer firefighting units to help them maintain staffing levels and recruit new personnel for this essential work.
- Grant humanitarian demining personnel appropriate social protection in view of the high level of risk and the significant public importance of their work.

To the Verkhovna Rada

- Use parliamentary oversight tools, including committee hearings and reporting requirements, to systematically track attacks on emergency responders, monitor state support to affected services and personnel, and identify gaps in protection, staffing, equipment, and rehabilitation.
- Review whether current legal and budgetary frameworks adequately protect emergency responders, humanitarian deminers, and the families of those killed or injured in service, and amend these frameworks where necessary.

To Ukrainian law enforcement

- Incorporate the findings and conclusions of this study into criminal case files concerning strikes on emergency responders and fire stations, where relevant.
- Assess, based on any available facts and evidence of specific attacks on emergency responders, whether to classify these acts as war crimes, including attacks against civilians under Article 8(2)(b)(i) of the Rome Statute, or attacks against civilian objects under Article 8(2)(b)(ii) of the Rome Statute.
- Assess, based on available facts and evidence of specific attacks on emergency

responders, whether any such incidents violate the prohibition in Article 51(2) of AP I on acts or threats of violence the primary purpose of which is to spread terror among the civilian population, and whether, depending on the facts, they may also amount to war crimes or other serious violations of international humanitarian law.

- In criminal proceedings relating to Russian strikes on emergency responders in Ukraine, examine whether identified suspects or accused persons located in Ukraine may also have participated in similar attacks committed in Syria.³ Where evidence supports that link, pursue available avenues for criminal liability under Article 8 of the Criminal Code of Ukraine.⁴

To criminal justice actors in other countries

- Review strikes on emergency responders as potential war crimes or other serious violations of international humanitarian law that may justify criminal proceedings under universal jurisdiction, regardless of the victims' nationality or where the crimes occurred. In particular, examine whether to open such proceedings in relation to attacks carried out by Russian forces in Ukraine.
- Provide technical and expert support to Ukrainian law enforcement agencies in investigating strikes against emergency responders.

For foreign governments and international organizations

- Enhance cooperation with the SES in developing and implementing technological solutions aimed at strengthening the safety and operational resilience of search-and-rescue operations, humanitarian demining, and other emergency response activities in conditions of armed conflict.

³ Pursuant to Article 8 of the Criminal Code of Ukraine, Ukrainian law enforcement authorities may initiate criminal proceedings under the principle of universal jurisdiction. This applies in cases provided for by international treaties or where a person has committed serious or particularly serious crimes against the rights and freedoms of citizens of Ukraine or the interests of Ukraine.

- Facilitate structured and continuous dialogue between Ukrainian emergency responders and civil defense services of other states to exchange experience related to operations in modern armed conflicts and other complex security environments.
- Support programs for the treatment and rehabilitation of injured emergency responders, including by expanding opportunities for specialized medical treatment and recovery abroad.
- Provide financial and material assistance for the repair and replacement of equipment and machinery damaged or destroyed as a result of armed attacks, prioritising emergency services operating in frontline areas. Preference should be given to equipment and vehicles that can be repaired rapidly and serviced within Ukraine.
- Use the findings of this report when considering targeted individual sanctions, under applicable sanctions regimes, against persons involved in the planning, ordering, or execution of strikes against emergency responders.

For national and international civil defense organizations

- Strengthen international professional solidarity by publicly condemning attacks against civil defense personnel in Ukraine, advocating for their professional needs, providing targeted assistance, and developing structured cooperation with Ukrainian civil defense services.

For private donors

- Facilitate the procurement of UAVs and robotic systems for firefighting and rescue operations, as well as for the armoring of vehicles used in the evacuation of civilians from frontline areas.
- Provide financial support to Ukrainian manufacturers engaged in the development of firefighting technologies and broader emergency response needs, including rescue

operations, debris removal, and humanitarian demining.

effective measures to enhance their safety and minimize risks.

For technology companies

- Provide discounted or in-kind access, where feasible, to critical technologies that enhance the safety, resilience, and operational capacity of emergency responders, including tools for communication, situational awareness, and damage assessment.
- Build clear safeguards into any support provided in conflict settings, including strong data protection, access controls, audit logs, and protocols that reduce the risk that sensitive operational information could expose emergency responders or affected civilians to further harm.
- Support Ukrainian developers and manufacturers working on practical tools for firefighting, rescue, and demining by offering technical partnerships, mentorship, interoperability support, and responsible procurement pathways.
- Work with Ukrainian emergency services, civil defense actors, and trusted nongovernmental partners to adapt existing commercial technologies to frontline emergency-response needs, including early warning tools, secure communications, situational awareness systems, and safer remote inspection capabilities.

For the academic, research and human rights communities

- Strengthen the systematic collection of disaggregated quantitative data and field documentation of attacks against emergency responders across different armed conflicts in order to enable comparative analysis, identify recurring patterns, and assess their immediate, long-term, and structural impact on emergency services, civilian resilience, humanitarian response, and post-conflict reconstruction.
- Study the motives, decision-making logic, and operational patterns of armed attacks against emergency responders to identify

METHODOLOGY

NOTE:

Where [Chapter 2](#) depends on issue-specific methodological choices or verification criteria necessary to understand a particular form of attack, the study explains those points in the relevant subsection.

Research scope and core terminology

This report focuses on Russian attacks on emergency responders in Ukraine from February 24, 2022 to October 31, 2025. Our analysis aims to establish the patterns of attacks, their possible motives, and main consequences.

We define **“emergency responder”** as someone who directly participates in the civil defense of the population during an emergency, including armed conflict, and responds to their immediate consequences to save lives. This includes carrying out civil defense tasks as defined in Article 61(a) of AP (I) to the Geneva Conventions,⁵ including rescue, evacuation, firefighting, and rubble clearing, among others.⁶

Accordingly, an **“attack on emergency responders”** means a targeted, primarily armed, strike,

intended to hinder or obstruct the performance of emergency response tasks as defined in AP (I).⁷

The **State Emergency Service (SES)**,⁸ is the main actor providing civil defense in Ukraine, therefore attacks on their personnel are the focus of this study. At the same time, we also include members of local⁹ and volunteer¹⁰ firefighting units, because they work closely with the SES, carry out similar tasks and use similar distinctive identifiers, including uniforms and insignia.¹¹

While this report focuses on analyzing Russian attacks on emergency responders in Ukraine, Truth Hounds is aware of reports alleging similar attacks by Ukrainian forces. We do not include those cases in this analysis because of asymmetries in data availability and the inability to verify such reports, and differences in the scale and geographic distribution of strikes by the Ukrainian and Russian sides.

Truth Hounds will separately engage representatives of the Ministry of Defense of Ukraine to clarify and verify available information about possible attacks by the Ukrainian military.

⁵ Additional Protocol I to the Geneva Conventions (1977).

⁶ Our definition of emergency responders excludes police, healthcare personnel, and humanitarian aid workers. We focus exclusively on those performing civil defense functions, who are sometimes colloquially referred to as “firefighters,” although in reality their duties extend well beyond firefighting.

⁷ Within this study we refer to two definitions of “attacks on emergency responders:” the theoretical, as represented in this text, and operational, which was used during monitoring and coding of specific incidents. For more information regarding these definitions and their reasoning, refer to the Codebook in Appendix 3 to this report.

⁸ The SES is a civil agency whose activities are determined and overseen by the Cabinet of Ministers via the Ministry of Internal Affairs (MID) of Ukraine.

⁹ Local firefighting units are firefighting units in communities where there are no SES units. They are created by local self-government bodies in coordination with the SES. Their personnel are salaried and required to possess the appropriate educational and professional qualifications.

Sources

Open-source monitoring

Data collection

An 8-person team of monitors tracked official websites of national and local authorities, as well as national, regional, and local online media, social media, obituaries, and other sources using key terms.¹² Each monitor was assigned to a specific Ukrainian oblast and possessed a deep understanding of the local information environment and its nuances.

Team members conducted monitoring in both Ukrainian and Russian, which required a flexible approach when identifying relevant cases. Through this process, the team identified over 400 incidents involving emergency responders,¹³ fire stations, or equipment as well as cases in which renewed attacks forced responders to suspend their operations. Ukrainian law enforcement authorities provided information on a confidential basis about 14 incidents of drone attacks which we included in the list.

The absolute majority of incidents is corroborated by at least two or three archived links to relevant sources. In addition, the Truth Hounds monitoring database contains collected digital evidence, including photos and videos documenting the attacks and their consequences.

For all incidents bearing the hallmarks of double-tap strikes, we sought to establish the geolocation and the time interval between the first and the subsequent strikes with the highest possible accuracy. However, considering the limited information in open sources, this was not always possible. As a result, data accuracy varies, so we classify the incidents as verified and suspected based on the criteria set out in [Chapter 2.1](#). The verification process included an in-depth analy-

sis of publications and other sources, including online maps (Google Maps, Google Earth, Wiki-mapia, NASA, FIRMS, etc.) and local social media channels. The team also geolocated damaged or destroyed fire stations as precisely as possible.¹⁴

Data analysis

After collecting the data, the team coded the incidents using a coding scheme developed for this study. This made the quantitative analysis easier and helped identify broader trends. Every incident included contains standardized information on:

- The date and place of the incident (locality, oblast);
- Whether there were active hostilities taking place in the locality or in its immediate vicinity;¹⁵
- Probable type of weapon used;
- Presence of the characteristics of double-tap attacks;¹⁶
- The consequences of the incident (number of injured and killed emergency responders, damaged or destroyed emergency operations vehicles and fire stations);¹⁷
- Circumstances of the incident (written description).

In these datasets, we consider only the consequences for emergency responders. Casualties among other groups and damage to civilian infrastructure, as well as other categories of emergency personnel (e.g., medical workers, police), are excluded, though they may appear in incident descriptions.

At least three team members verified data at various stages of the research. Incidents suggesting a double-tap strike or damage to a fire station underwent a separate, more rigorous verification process, detailed in [Chapter 2.2](#). Despite these measures, the large number of incidents and the primarily manual data collection means some human error may remain.

¹² The key terms included "ДСНС" ("SES"), "рятувальник," "надзвичайник," "вогнеборець," ("emergency responder"), "ДПРЧ" ("state fire and rescue unit"), "повторна атака," "повторний обстріл," "повторний удар" ("double-tap strike"). This list is not exhaustive and could change depending on the specific source.

¹³ Due to data availability, our monitoring focused primarily on SES personnel.

¹⁴ For security reasons, we do not publish data about the precise locations of incidents. At the same time, we will consider individual requests for such information on a need-to-know basis and to provide it for purposes such as justice, academic research.

¹⁵ More details about such characteristics can be found in [Chapter 2.1](#).

¹⁷ A more detailed description of every variable used to code this data and possible values for these variables are provided in the Codebook. See: [Appendix 2](#).

Semi-structured interviews

Data collection

In this study, we draw on 21 semi-structured interviews conducted in Kharkiv, Kherson, Mykolaiv, Kyiv, and Khmelnytskyi Oblasts, as well as in the city of Kyiv, in 2025.¹⁸ We interviewed:

- 6 local and 2 volunteer firefighters;
- 4 Ukrainian Red Cross volunteers and employees;
- 4 eyewitnesses of double-tap strikes on emergency responders;
- 3 civil defense experts; and
- 2 SES emergency responders.

Truth Hounds documenters conducted on-site interviews in Ukrainian and Russian, and obtained respondents' written informed consent, in accordance with the Truth Hounds Ethics Code.¹⁹ Because some interview locations lay close to the frontline, documenters often worked under a high risk of shelling. This shows how difficult the interview conditions were and how seriously they threatened the lives and health of both documenters and respondents. Such a high-stress environment may have, at times, affected the quality and accuracy of the documentation.

The interviews focused on the qualitative impact of armed attacks on rescue operations, particularly regarding emergency responders' ability to provide timely aid, their physical and mental well-being, and the protective and adaptive measures they adopted in response to changing wartime conditions.

Documenters used a pre-established set of open-ended questions for the semi-structured interviews. The questions reflected our research goals and drew on monitoring findings. This approach helped staff collect the necessary data, while allowing room for follow-up questions and adaptation to each interviewees' responses.

¹⁸ Except Khmelnytskyi Oblast, where the interview was conducted in 2023. In this context, our understanding of the tactic of double-tap strikes largely relies on our interviews with various categories of respondents (emergency workers, civilians, experts on Russian missile weaponry and chain of command, etc.), conducted as part of the 2024 study. See: Truth Hounds (2024). *Cruelty Cascade: Examining the Pattern of Russian Double-Tap Strikes in Ukraine*. PP. 61-62.

Data processing and analysis

For security reasons, Truth Hounds anonymized all interviews in accordance with internal protocols. This meant concealing respondents' names, and, in some cases, all identifying details including locations and attack dates, etc.

Interview quotes used in this report remain as close to the original as possible with minor edits for clarity and linguistic clarity that do not change the meaning.

SES data

As the central executive body responsible for implementing civil defense policy in Ukraine, the SES has the most complete, up-to-date and trustworthy information on the subject of this report. Our team drew on data provided by SES upon request as well as SES data published on its official channels.

Such open-source data is reliable because SES has designated press officers who accompany emergency responders to emergency sites, including armed attacks, and record the aftermath in photos and videos. They also often witness and document double-tap strikes. The SES then publishes this information on its online channels. This information is particularly rich because SES press officers often operate in locations inaccessible to journalists, primarily due to their proximity to the frontline. Thus, SES digital evidence often is the best or even the only confirmation of events, especially in frontline settlements under constant shelling.

In response to a Truth Hounds' request, the SES provided statistical data regarding the consequences of armed attacks for rescue work, particularly about the numbers of:

- Emergency responders injured and killed as a result of armed attacks;
- Damaged or destroyed emergency operations vehicles; and
- Damaged or destroyed fire stations.

This data enabled us to compare the results of our open-source monitoring with official SES figures and assess any discrepancies. SES data is generally more comprehensive than that available via open sources, as the SES directly communicates with emergency responders in the field and physical access to attack sites. As a result, this data helped establish an understanding of the scale of the attacks examined in this study. At the same time, due to additional open-source research and verification, our monitoring data offers substantially richer contextual detail, unavailable in the SES statistics. It enables us to understand characteristics of individual incidents and the patterns that emerge across the dataset as a whole. Therefore, throughout the report, but particularly in the chapter on attack patterns, we primarily draw on monitoring findings.

Limitations

We originally intended to base this study on interviews with SES emergency responders. We sought to understand when and how they came under attack, how this affected their physical and mental health, and what additional support they needed. However, Truth Hounds was unable to obtain broad access to SES emergency responders.²⁰

Accordingly, we focused on interviewing other categories of emergency responders, particularly local and volunteer firefighters. While these actors perform similar tasks and face comparable challenges in the full-scale war, we acknowledge that the lack of information directly from SES emergency responders limits this study.

Relying on data from open sources, such as news reports, interviews, and documentary films, among others, we worked to understand the impact of double-tap attacks on SES emergency responders. These sources are, however, unlikely to provide as complete or coherent an understanding as interviews conducted specifically for this study would have.

The second limitation of our study is that verification of double-tap attacks and of strikes on fire stations was almost entirely done based on open sources. This is primarily due to the sig-

nificant number of identified incidents and the teams' limited access to some areas because of hostilities or occupation.

Although we made considerable efforts to analyze a wide range of sources—from news publications and evidence provided by SES and witnesses, to satellite imagery and reports from local Telegram channels—this approach leaves room for researcher interpretation, bias and human error. At the same time, it does not diminish the validity of the conclusions that can be drawn. Rather, it calls for a cautious approach and an awareness of the limitations inherent in the methods used for data collection and analysis.

Datasets

As part of this study, we are publishing four datasets for further quantitative analysis and replication, including:

- A dataset of all incidents we identified in which emergency responders, emergency operations vehicles or fire stations were damaged or destroyed, or in which emergency operations were forced to halt due to shelling;
- A dataset of incidents bearing the hallmarks of double-tap strikes;
- A dataset of incidents leading to damage or destruction of fire stations or other buildings used by emergency responders; and
- A dataset of messages from Russian Telegram channels containing mentions of Ukrainian emergency responders or attacks on them.

All datasets are available as appendices to this report. In addition, a codebook is included as a separate document, providing a detailed explanation of each variable, its possible values, and our coding approaches.²¹

CHAPTER 1

GENERAL OVERVIEW OF ATTACKS ON EMERGENCY RESPONDERS

This chapter examines how attacks on emergency responders and emergency infrastructure have evolved over the course of Russia's full-scale invasion of Ukraine. It traces changes in the frequency, geographic distribution, and apparent patterns of these incidents, including shifts in the intensity of attacks and the forms they took at different stages of the war. By looking at trends over time, the chapter shows how violence against emergency services has become a recurring feature of the conflict.

In total, between February 24, 2022 to October 31, 2025, we identified 401 incidents that resulted in:

- At least 42 emergency responders killed and at least 258 injured;²²
- At least 248 emergency operations vehicles damaged or destroyed;
- At least 138 fire stations damaged or destroyed; and
- The suspension or termination of emergency operations after repeat attacks.

At the same time, according to information provided by the SES in response to a request from Truth Hounds, 111 fatalities and 550 injuries of emergency responders had been reported in the same period.²³ The SES also indicated that 617²⁴ emergency operations vehicles had been damaged or destroyed, while 449²⁵ fire stations and other SES facilities had been affected.

As explained in the Methodology section, we have grounds to believe that the actual scale of the consequences of armed attacks on emergency responders is closer to and may even exceed the figures reported by the SES.²⁶ In this section, however, we primarily rely on data from our own monitoring, as it offers a higher level of detail due to the additional open-source research conducted by our team.

²² This dataset does not include incidents in which responders were killed or injured by mine-blast trauma. While such incidents constitute a considerable proportion of casualties among emergency responders, they do not amount to direct and potentially deliberate attacks, as mines are inherently indiscriminate. That said, one could argue that civil defense personnel, who are primarily responsible for mine clearance, are exposed to a disproportionate level of risk of such trauma. Nevertheless, due to the narrow scope of this report, these cases are not included in the analysis.

²³ SES response to an information request by Truth Hounds (January 7, 2026).

²⁴ 507 and 110, respectively.

The first known case of an emergency responder dying in the line of duty since February 24, 2022

The first documented killing of an emergency responder in the line of duty occurred on March 10, 2022 in Mariupol. An air strike on the Main Directorate (MD) building of the SES of Ukraine in Donetsk Oblast killed 39-year-old civil defense service major and main inspector of the Industrial Safety Unit in the Emergency Prevention Department, **Oleksii Pankov**.²⁷ The MD building suffered significant damage, clearly visible in pictures and videos from the emergency site,²⁸ satellite images from Google Earth dated March 14, 2022, and interviews with eyewitnesses published in open sources.



"I was in the garage when I felt a powerful blast wave. I immediately understood that the strike was somewhere nearby but I wasn't sure where. I put on my uniform and ran outside. In the backyard, I saw that on one side, the [MD] building was destroyed from the [fourth] to the [first] floor. The first thing I noticed was a wounded firefighter lying next to the field kitchen. We put him on a stretcher and took him to the medical unit," shared emergency responder **Oleksandr Hurov**, who provided assistance to Oleksii immediately after the attack.²⁹



SES emergency responder Oleksii Pankov (right) with colleagues. Source: Ministry of Internal Affairs of Ukraine (MIA) Memorial Book.³⁰

Oleksii was originally from Kostiantynivka, Donetsk Oblast, and dedicated over 15 years to emergency response operations.

²⁵ 415 and 34, respectively; on November 5, 2025, the Minister of Internal Affairs of Ukraine, Ihor Klymenko, noted on his Telegram channel that over the previous three months, Russian forces had carried out more than 60 attacks on State Emergency Service units, resulting in five deaths and over 30 emergency responders injured.

²⁶ The possible reasons for the differences in the figures between the TH monitoring and the SES data are explained in detail in the [Methodology](#) chapter.

“

“Honesty and integrity, bravery and professionalism, ability to make decisions in a timely, knowledgeable manner in various difficult and dangerous situations [...] he will always serve as an example for SES personnel.” This is how Pankov is remembered in the MIA Memory Book.³¹

1.1. Trends over time

The first incidents resulting in losses of emergency personnel and property occurred in February and early March 2022, immediately following the start of Russia’s full-scale invasion.

In 2023, the number of reported attacks on emergency responders more than doubled, rising from 24 to 59, which may indicate an increase in the Russian military’s targeted threats to Ukrainian emergency response efforts. That year also saw a rise in incidents showing the hallmarks of double-tap strikes, from 10 to 25.

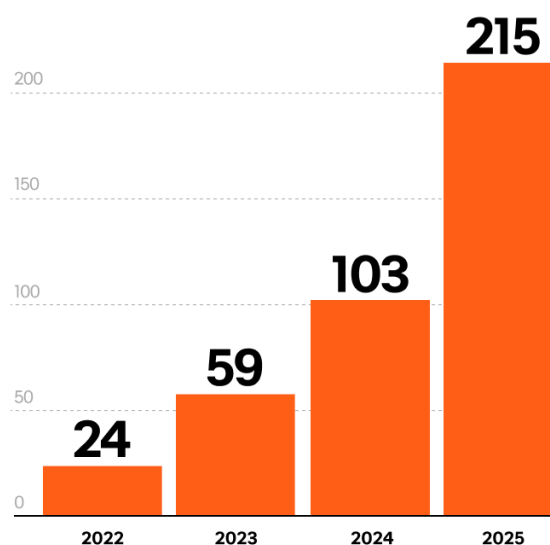
In 2024, the total number of incidents increased by approximately 75% compared to 2023 (from 59 to 103). Furthermore, the number of reports of the damage or destruction of emergency operations vehicles increased by approximately 170%, while the number of reports of damage to fire stations increased by 50%.

In 2025, the largest number of total incidents in one year during the observation period was recorded—215.³² As in the previous year, cases involving damage to or destruction of emergency vehicles and fire stations rose sharply, by more than 90% and 60%, respectively.

“

“Since the start of the full-scale invasion, there have been certain changes in the nature of attacks. At the beginning of the war, the number of strikes was significantly lower, whereas now damage to equipment by FPV drones—in other words, the deliberate destruction of

fire trucks—is observed almost daily. Reports of repeat shelling or FPV-drone strikes during firefighting operations are received virtually every day. A similar trend can be observed with respect to facilities: the number of double-tap strikes against them has also increased,” **Viktor Likanov**, Deputy Director of the Department of Resource Support and Head of the Directorate for Construction and Operation of Mobile Assets of the SES, told Truth Hounds in an interview.³³



Distribution of incidents by year. Source: Truth Hounds.

Meanwhile, despite a significant increase in the number of attacks, their lethality dropped: in 2025 approximately 3% of attacks resulted in the death of an emergency responder compared to around 15% in 2023. A similar trend appears regarding injuries, with 20% of incidents causing injuries in 2025 compared to almost 35% in 2023. This may indicate the effectiveness of updated emergency responder safety protocols or the adaptation of emergency responders to the challenges of war compared to previous years, among other possible factors.

SES safety protocols in the event of a threat of a double-tap strike

At the request of Truth Hounds, the SES provided information in January 2026 on changes to emergency responder safety protocols related to the threat of double-tap strikes. These SES innovations may be one of the factors behind the reduction in the

lethality of attacks and could potentially serve as a useful approach for emergency service personnel in other contexts where armed conflicts and double-tap strikes persist.



"[Local] SES duty service and the operational coordination centers conduct continuous monitoring of Ukraine's airspace to determine the probable number of airborne weapons and their time of arrival, as well as to immediately inform management bodies and units of the threat of the use of airborne weapons in order to withdraw personnel to a safe location. After an [SES] unit arrives at the site of an [emergency], fire, or hazardous incident, a designated person is assigned to monitor the airspace for threats of airborne attacks, with the aim of alerting personnel to danger and maintaining constant communication with the SES operational coordination center. To alert personnel to danger and ensure their immediate withdrawal from the site of an [emergency], fire, or hazardous incident, a special signal is issued. While carrying out assigned tasks and coming under fire, the head of an Operational and Rescue Service of Civil Protection of the State Emergency Service of Ukraine unit takes measures to immediately evacuate the unit from the shelling zone to a safe location. The unit commander reports the situation to the relevant operational coordination center of the SES and acts in accordance with the information provided by the center regarding the threat of the use of airborne weapons."³⁴

³⁴ Written SES response to an information request by Truth Hounds (January 7, 2026).

1.2. Geography

Most incidents, 88%, occurred in frontline areas, mainly in Donetsk, Kharkiv, Kherson, Dnipropetrovsk, Sumy, and Zaporizhzhia Oblasts.

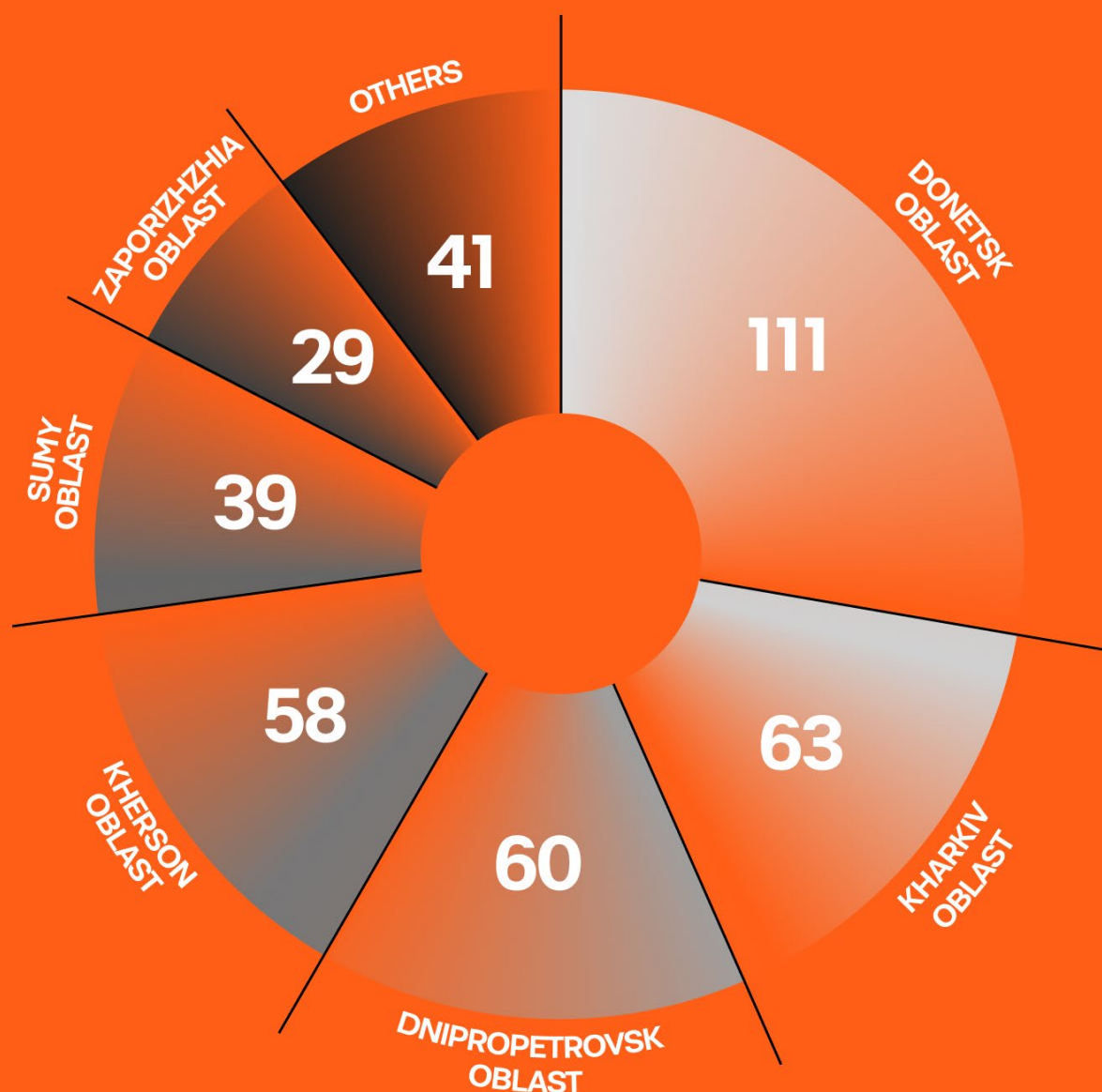
The cities most affected were Kherson (30 incidents), Nikopol (23 incidents), and Kharkiv (16 incidents). In addition, over 10 incidents occurred in Dobropillia, Kostiantynivka, and Lyman, Donetsk Oblast.

45 incidents occurred in cities relatively far from the frontline, including Odesa, Dnipro, and Kryvyi Rih (5 cases in each). As of December 22, 2025, the shortest distance from each of these cities to the nearest frontline exceeded 70 km, as per the DeepState map.³⁵ This indicates that, despite an obvious geographic concentration, the attacks are not confined exclusively to frontline areas but affect the country as a whole, with the exception of the western oblasts.³⁶

³⁶ Detailed possible explanations for the geographical concentration of attacks in the frontline territories are discussed in Chapter 2.

DISTRIBUTION OF THE INCIDENTS BY OBLAST

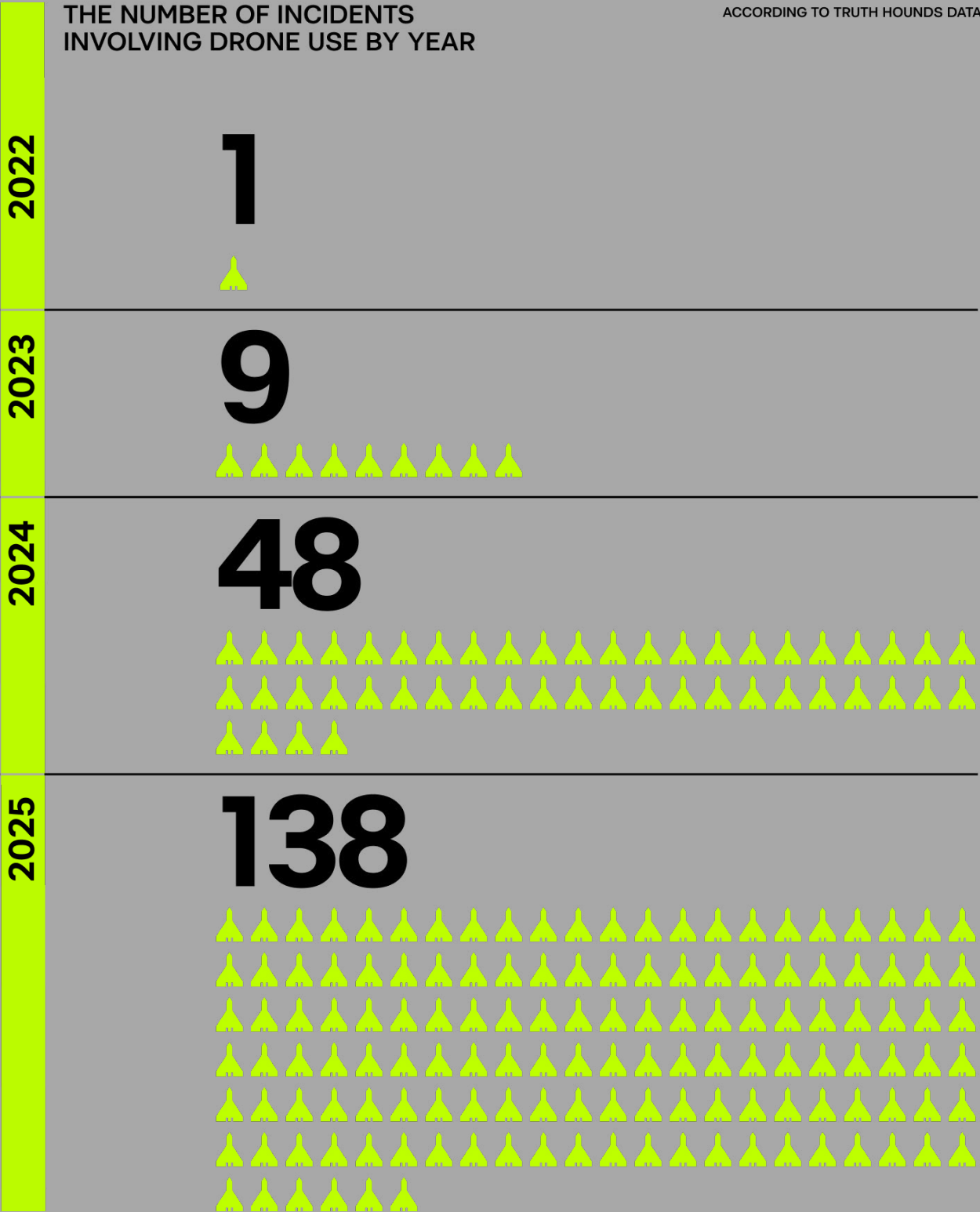
ACCORDING TO TRUTH HOUNDS DATA



1.3. Weapons

According to open-source data, short- and long-range drones have become the most common weapon used in attacks that disrupted emergency

response efforts or resulted in losses of personnel and property. Used both independently and in combination with other types of weapons, they featured in nearly half of all incidents.³⁷ These findings correspond with the overall increase in drone activity during the conflict.³⁸



A sharp increase in the frequency of drone use occurred in 2024, when the number of such incidents rose fivefold compared to the previous year. Furthermore, 2025 proved to be the defining year, with the number of reported attacks involving drones reaching 138—almost 3 times higher than in 2024 and more than 15 times higher than in 2023.

The data shows a clear change over time in the types of weapons used in these attacks. In 17% of incidents, attackers most likely used barrel or rocket artillery. Reports of those weapons peaked in 2023, then declined in 2024 and 2025, especially relative to drone attacks. Data from Nikopol, Dnipropetrovsk Oblast, illustrates this trend. In 2023, drones accounted for 0% to 23% of monthly shelling incidents. In 2024, that share rose to 13% to 63%. From April to June 2025, drones made up more than half of all attacks on the city.³⁹

In approximately 10% of incidents, various types of missiles were reported to have been used.



One Ukrainian Red Cross volunteer explained how the types of weaponry evolved over time. “In 2022, when we were deployed, the “neighbors” [a euphemism for Russians—ed.] were using mortars and MLRS [multiple launch rocket systems—ed.]. Later, guided aerial bombs began to appear, and now it is FPV drones. FPV drones are frightening because they strike suddenly: it’s nearly impossible to count or track them, so we try to avoid routes where they cluster. [...] Currently, those that fly using optical fiber are particularly threatening, even with the possible [safety] measures”.⁴⁰

1.4. Conclusion

The number of reports on attacks against emergency responders, vehicles for emergency operations, and fire stations has steadily grown since the beginning of Russia’s full-scale invasion of Ukraine, reaching a high point in 2025. Such attacks primarily affected frontline communities, where emergency services play a critical role because of their proximity to active hostilities. However, these incidents also occurred in areas farther away from the frontline, showing how widely this pattern extends.

Most attacks were carried out using various types of drones. This trend, unprecedented in other armed conflicts, became particularly pronounced in 2024–2025. The use of drones, a weapon often characterized by high precision, may further indicate an inference regarding the deliberate nature of attacks on emergency responders or the implementation of insufficient measures to ensure their safety.



Photo:
Pavlo Petrov

CHAPTER 2

FORMS OF ATTACKS ON EMERGENCY RESPONDERS

2.1. Introduction

This chapter examines the two most common forms of attacks on emergency responders during the full-scale Russo-Ukrainian war on Ukrainian-controlled territory. They include attacks on fire stations and double-tap strikes.

The prevalence of these types of attacks may be attributed to the high predictability of emergency responders' presence at specific locations and times. Fire stations are stationary facilities that house emergency personnel and emergency operations vehicles. Consequently, in the event of an attack, the likelihood of damage to both personnel and equipment is predictably high. In the case of double-tap strikes, a similar effect is achieved through a different mechanism: the attacker introduces a deliberate pause between the initial strike and the subsequent one(s) at the same location. This interval may be calibrated, among other considerations, to correspond to the time required for emergency responders to arrive and begin operations. The number of such attacks, their widespread geography, and the relative availability of data led to our focus on these two practices in particular. They will be discussed in-depth later on in this chapter.

At the same time, violence against emergency responders also takes on other forms. We recorded about 70 incidents with different circumstances. These include targeted strikes on evacuation groups and pyrotechnical teams, the "hunting" of fire trucks, as well as attacks on emergency responders during complex, large-scale environmental shocks.⁴¹ While we do not provide an in-depth analysis of these cases due to data constraints, we offer a brief overview below and encourage further research on them.

Attacks on evacuation teams

A separate category of attacks is those targeting evacuation groups operating in the frontline areas. As of August 2025, 27 SES evacuation teams ("Phoenix") and 24 units of the National Police ("White Angels") operated in Ukraine.⁴²

According to Deputy Minister of Internal Affairs Oleksii Serhieiev, these groups are equipped with

armored vehicles, electronic warfare (EW) devices, satellite communications, medication, food, and other resources required to evacuate local populations.⁴³ SES and police teams, working with local authorities and volunteers, also carry out the Ukrainian government's decisions on the forced evacuation of civilians from dangerous areas.⁴⁴

Apart from evacuation, these units are tasked with providing humanitarian aid to locals who continue residing in frontline areas.⁴⁵ Thus, attacks on evacuation teams not only put the lives of emergency responders and civilians in those vehicles at risk but also destabilize the provision of critical aid to the local population more generally.

Open sources indicate at least three attacks on SES Phoenix units in Donetsk Oblast. In each case, emergency responders were using transportation with civil defense insignia.⁴⁶

Attacks on mine clearance teams

In 2025, there were over 130 licensed mine action operators (MAOs) in Ukraine.⁴⁷ These include government entities, such as SES emergency and rescue units, military units of the State Special Transportation Service and the AFU, foreign organizations, Ukrainian NGOs, and other private national and international operators.⁴⁸

One of the key tasks of these actors is humanitarian demining, with government agencies playing a key role, as some have the exclusive right to certify MAOs. Additionally, only government operators can carry out humanitarian demining in the territories within 20 km of the frontline.⁴⁹

Attacks on deminers do more than cause physical and psychological harm to personnel. They also limit demining efforts, which in turn increases the possibility of civilian death and hinders the use of land for agriculture.

⁴¹ There have also been examples of remote mining of roads leading to regularly shelled localities, setting up booby traps during manual mining of territories, and other tactics that hinder demining. These may not target first responders alone, but they are likely to impede emergency response in frontline areas and humanitarian demining in de-occupied territories.

⁴⁸ Not all certified demining organizations are currently active in Ukraine. Among those operating, not all are engaged in the direct defusing of mines and explosive remnants; some also focus on technical and non-technical examination of territories and similar activities.

According to our observations, direct attacks on deminers remain relatively rare, though several possibly intentional incidents have occurred in recent years. For example, on June 11, 2025, during demining work in Kharkiv Oblast, a Russian drone attacked SES mine action specialists. Emergency responder Vasyl Belinskyi died,⁵⁰ and two of his colleagues suffered significant injuries.⁵¹

"Hunting" of emergency operations vehicles

Emergency operations vehicles have been targeted in frontline areas in various regions of Ukraine. This damage or destruction is present among all the aforementioned attack methods. At the same time, in a number of episodes recorded, the destruction of emergency operations vehicles occurs under circumstances that do not fit into any of the listed scenarios. These attacks are incidents when emergency responders' vehicles became a target in and of themselves, regardless of whether there was prior shelling, where the unit was, and what tasks it was performing.

Since 2024, attackers have increasingly used camera-equipped short-range drones to target emergency vehicles. These drones let operators identify vehicles, track them, and strike at any moment, significantly reducing the time between target detection and strike. Similar incidents include a drone attack on a SES tanker truck delivering water to the population of Huliaipole, Zaporizhzhia Oblast, in January 2025,⁵² and a drone strike on a fire truck *en route* to respond to an emergency in the Krasnopillia hromada in Sumy Oblast in September 2025.⁵³

Disruption of emergency response during large-scale environmental shocks

Another form of harm concerns the disruption of emergency response during large-scale environmental shocks. To date, one case illustrates how such disruptions may occur in practice: the destruction of the Kakhovka Hydroelectric Power Plant (HPP) on June 6, 2023 after an explosion inside the dam caused a catastrophic breach.⁵⁴ This case warrants separate attention for two rea-

sons. First, the scale of environmental destruction in such incidents places immense strain on emergency services and inflicts widespread and long-term suffering. Second, when combined with ongoing armed conflict, such incidents also intensify risks for first responders forced to work under fire, and for civilians more broadly.

In Ukrainian-controlled areas, shelling exposed emergency responders operating in flooded zones to serious danger, significantly complicating evacuation efforts and delaying assistance.⁵⁵ These conditions increased risks not only for emergency personnel but also for civilians awaiting evacuation. One emergency responder interviewed by Truth Hounds recalled the evacuation of a man with a spinal injury from the Ostriv neighbourhood in Kherson, flooded by the HPP destruction:



"[He] was on painkillers, and the situation was that the injection worked for only two hours. We had to get him out quickly, but the evacuation took almost eight hours because there was shelling and our people just could not reach him."⁵⁶

Concluding note

The fact that these four types of attacks occur less frequently than double-tap strikes and attacks on fire stations does not make them less important for research and accountability. In some cases, they may provide even clearer indicators of intent. When drones strike fire trucks bearing clearly visible distinguishing markings, the facts may strongly support the inference that the attackers knew they were targeting emergency responders. Careful analysis of these incidents is therefore essential to understanding the full pattern of attacks on emergency response efforts in Ukraine and to supporting future war-crimes investigations.

The four types of attacks above are characterized by less predictability of emergency responders' locations. The following sections focus on double-tap strikes and attacks on fire stations, where predictability is an important factor.

⁵¹ There is also a known case of a strike with a 9M723 ballistic missile on deminers from the Danish Refugee Council on September 4, 2025 near Chernihiv, which killed two people and injured eight more. However, since this study focuses on emergency responders directly involved in saving civilians during emergencies, we do not consider this case in detail.

International trends in attacks on emergency, medical, and humanitarian personnel

The rising frequency of attacks on emergency responders occurs within the broader context of escalating violence against other categories of first responders and humanitarian personnel in Ukraine and worldwide. These patterns are best viewed together, as all of these groups are protected under IHL, are clearly marked, and provide essential assistance to civilians during armed conflicts.

The Aid Worker Security Database recorded more humanitarian worker deaths in 2023 and 2024 than in any previous two-year period.⁵⁷ It documented 676 fatalities across 27 countries, with the highest tolls in the Gaza Strip, Sudan, South Sudan, Nigeria, and Lebanon.

In Ukraine, 6 humanitarian workers were killed in 2023 and 13 in 2024.⁵⁸ An OSCE interim report noted an increase in the number of attacks against humanitarian workers in Ukraine in 2025, especially in Kherison Oblast. Six of the 9 humanitarian workers and volunteers interviewed by the organization said they had been attacked while on duty; 7 said they had colleagues who had been targeted.⁵⁹

Like emergency responders in Ukraine, humanitarian workers in various contexts have come under attack while providing aid to civilians, conducting evacuations, or traveling in vehicles with clearly visible identifying markings.⁶⁰

According to the Safeguarding Health in Conflict Coalition and Insecurity Insight, 2023 and 2024 also recorded the highest number of violent incidents against healthcare workers and medical infrastructure. For instance, in 2024, 3,623 such cases were identified through monitoring and collecting information from partner organizations, a 62% increase compared to 2022. The highest number of fatal incidents in 2024 occurred in Lebanon (408), the Palestinian territories (228), Ukraine (78), and Sudan (67).⁶¹

There is an increase in the use of various drones in attacks on healthcare systems around the world. In 2024, at least 300 incidents involving drones were recorded: the percentage of such incidents among all attacks involving explosive weapons grew to 20%. Such attacks hit medical professionals especially hard in Ukraine, the Palestinian territories, Lebanon, Myanmar, and Sudan.⁶²

The unprecedented rise in attacks on emergency services, healthcare personnel, and humanitarian

workers in conflict-affected countries over the past three years may be a result of insufficient attention to such crimes at the highest levels and the impunity of those responsible. Governments, international organizations, civil society groups, and other actors must make increased efforts to support those who are first to provide assistance to civilians in emergencies, ensuring they have adequate safety and protection. This includes, in particular, identifying and prosecuting those responsible for such crimes.

2.2. Double-tap strikes



"EVERY TIME WE PUT OUT A FIRE, IMMEDIATELY THERE ARE MISSILES RIGHT ABOVE US, AND STRIKES NEARBY."⁶³

Local firefighting unit driver from a village of Mykolaiv Oblast

ON THE MORNING OF JULY 6, 2025,

a series of drone attacks ignited a fire at a gas station on Beryslavske Highway in Kherson. When SES emergency responders arrived on site and started putting out the fire, a first-person view (FPV) drone hit their bright red tanker truck that was parked across from the gas station, significantly damaging the vehicle. The personnel were not injured.⁶⁴ A few hours later, the "PHOBOS | UAV Telegram channel, allegedly associated with the 18th Combined Arms Army of the Russian military, which is part of the Dniepr Group of Forces,⁶⁵ published a video of the attack taken by the drone camera. The post stated that "the SES [...] is targeted when it creates obstacles to execution of combat tasks."⁶⁶



Fire truck damaged by a double-tap FPV drone strike in Kherson. Source: SES in Kherson Oblast.⁶⁷

This incident is a typical example of a **double-tap strike**, a military tactic involving two or more consecutive strikes on the same clearly defined location, with intervals between the strikes typically ranging from at least ten minutes to several hours.⁶⁸

Such strikes are marked by:

- Spatial continuity: Strikes occur at the same geographic location, indicating a deliberate focus on a single, specific site. This spatial repetition demonstrates a direct operational connection between the first and subsequent attacks.
- Shift in target scope: The time gap between strikes allows for the arrival and operational engagement of civil defense personnel, medical teams, or other first responders assisting casualties or addressing the consequences of the initial attack. This deliberate delay reflects a shift or expansion of the intended target from the original object of attack to those in the aftermath.

These are the characteristics that informed our approach to verifying incidents as double-tap strikes.

2.2.1. Note on subchapter methodology

The incidents analyzed in this subchapter were identified using in-depth monitoring of open sources, particularly online media, social media (Telegram, Facebook, Instagram, X, and VK), the official websites of Ukrainian national and local agencies and Russian occupation administrations,

⁶⁸ These clearly defined upper and lower thresholds of the time gap have been established based on the most typical intervals between attacks and are due to the need to set measurable criteria to verify cases of double-tap strikes. In reality, the gap between the attacks may be shorter or longer, depending on the circumstances. For instance, if an attack takes place near a fire department, the arrival of first responders who start addressing the consequences may start more quickly than in ten minutes. Conversely, if the first attack caused significant damage, first responders' work at the incident scene may last several days. Since we identified only a small number of such cases and they usually require assessing additional factors to qualify them as double-tap strikes, these episodes have been excluded from this analysis.

each incident, we established the geolocation with the highest possible accuracy and the time interval between the first and subsequent attacks. This required additional analysis of online maps (Google Maps, OpenStreetMap, Wikimapia, Map Ukraine Daily Update, etc.), satellite images (Google Earth, FIRMS), air alert notifications, etc. Additionally, in several cases, Truth Hounds team members could provide information about specific incidents either because they witnessed the attacks or knew the geography of certain localities well and could accurately identify the locations from photos or videos.

The incident verification process involved checking the data for factual accuracy and compliance with two key criteria for a double-tap strike: spatial continuity and a time interval between the first and subsequent strikes of ten minutes to five hours. When available, the likely type of weapon used in the first and subsequent attacks, the existence of video of repeat strikes, and digital evidence of their consequences (e.g., photos or videos of damaged fire trucks or injured emergency responders) were also taken into account. This aimed to capture important contextual information that could help confirm a double-tap strike when precise geolocation or time interval data was unavailable.⁶⁹

2.2.2. Geography, patterns, and consequences

Truth Hounds previously verified 36 cases of double-tap strikes between February 24, 2022 and August 31, 2024 (26 of which had emergency responders present at the scene).⁷⁰ In total, there were over 60 incidents bearing some hallmarks of double-tap strikes but not all could be verified.⁷¹

⁶⁹ More details on the verification criteria and procedure are available in the codebook for the Double-Tap Strikes dataset, which is included in Appendix 3 of this study.

⁷⁰ Importantly, in the previous study, the lower threshold for the time period to qualify the attack as a double-tap strike was five minutes rather than ten.

⁷¹ As part of this study, we did not conduct a separate analysis of all incidents that showed signs of double-tap strikes and occurred in the presence of other emergency services or bystanders who provided assistance to the survivors. According to online monitoring by Truth Hounds, the number of all incidents with characteristics of double-tap strikes between February 24, 2022 and October 31, 2025 may well exceed 300, i.e., be at least twice as high as the scope covered by our analysis in this report.

⁷² Archived links to video evidence can be found in the corresponding column of the "Double-Tap Strikes" dataset in Appendix 3, or bystanders who provided assistance to the survivors. According to online monitoring by Truth Hounds, the number of all incidents with characteristics of double-tap strikes between February 24, 2022 and October 31, 2025 may well exceed 300, i.e., be at least twice as high as the scope covered by our analysis in this report.

Building on previous research, this study covers February 24, 2022 to October 31, 2025, and exclusively examines incidents with characteristics of double-tap strikes that had emergency responders present. This means that the analysis does not include cases where only representatives of other emergency services, such as medics and police officers, were affected.

Within the specified time frame, we identified 200 incidents bearing the hallmarks of double-tap strikes.⁷² Of these, in 92 instances (46%) it was possible to establish a match between the location of the first and subsequent strikes, as well as compliance with the time interval specified above.⁷³ In addition, of the 92 incidents, 21 contained video evidence of the subsequent attacks: either from cameras of first responders who were at the scene or footage from Russian drones published on Telegram channels.⁷⁴

Explaining the gap between verified and suspected double tap attacks

The difference between the total number of incidents we identified as possible double-tap strikes and the smaller number we were able to verify reflects several factors.

First, information providers (primarily central and local authorities as well as the media) may deliberately refrain from publishing precise data or photo and video materials from strike sites for security reasons. Disclosing such details, especially immediately after an incident, could be used by the adversary to assess the impact of strikes, adjust fire, and carry out further attacks. As a result, in a significant number of cases, it was impossible to determine the exact location.

Secondly, most publications do not contain clear information about the time interval between the attacks. In some cases, this information can be obtained from other sources, for instance, by analyzing notifications about the beginning and the end of the air alert or reports of explosions in local Telegram channels. However, in a large number of cases, such information is unavailable or insufficiently reliable, which significantly complicates establishing the interval between the first and subsequent strikes. As a result, some incidents that could have been classified as double-tap strikes for the purposes of this study, based on other contextual characteristics, did not make it to the final verified list. The quantitative figures presented here are dependent on the defini-

tion of double-tap strikes applied, the procedures for data collection and verification, and the sample of sources. Accordingly, by default, they provide only an approximate and likely underestimated scale of attacks. For example, during interviews with emergency responders in frontline settlements, we repeatedly documented double-strike incidents that were not reported by either authorities or the media.⁷⁵

On one hand, this may be linked to the routine use of double-tap strikes in areas immediately adjacent to the frontline. Given the frequency of attacks, only those incidents resulting in damage to emergency response vehicles or injury or death of personnel often end up on social media or news outlets. As a result, incidents that do not cause visible consequences may go unreported.⁷⁶

On the other hand, for security reasons, information about double-tap strikes on legitimate military targets may not be made publicly available. According to AP I to the Geneva Conventions, emergency responders may be involved in performing tasks at military facilities or act under the direction or control of the military without losing their protected status, as long as these tasks cause no direct harm to the adversary.⁷⁷ This means that even if the primary attack is against a legitimate military target, repeat strikes carried out after a certain time and likely aimed at emergency services should be considered war crimes.⁷⁸ However, given the sensitivity of any information about the destruction of military targets in conditions of active armed conflict, such incidents can remain invisible to the general public.

Despite the above limitations, the data presented paint the most complete picture to date of double-tap strikes in Ukraine and the impacts on emergency responders.

⁷⁵ A detailed legal analysis of the use of the double-tap strike tactic against emergency services, particularly on the example of specific incidents, can be found in section 2.4 of the study "[Cruelty Cascade: Examining the Pattern of Russian Double-Tap Strikes in Ukraine](#)."

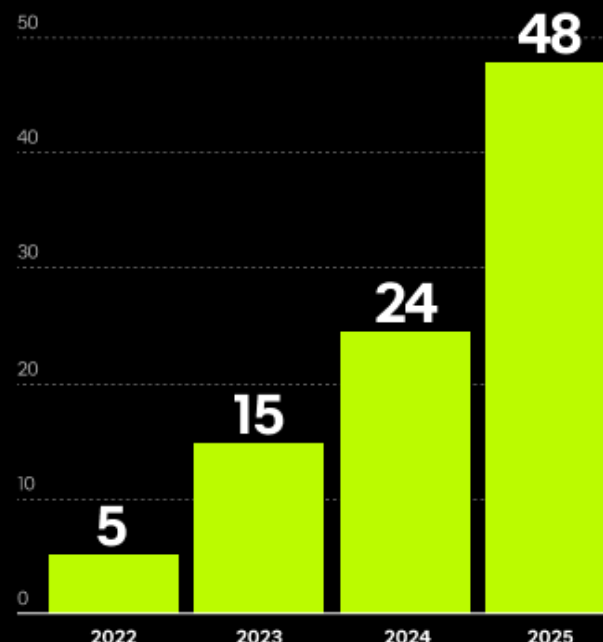
⁷⁶ The analysis covers the period from February 24, 2022 to October 31, 2025.

⁷⁷ More details about this are available in [Chapter 3](#).

⁷⁸ The Russian analog of YouTube.

⁷⁹ More information about the rhetoric of Russian sources about the double-tap attack tactic and specific cases of its use in Ukraine can be found in [Chapter 3](#).

Data collected and analyzed by Truth Hounds show that the number of double-tap strikes increased annually between 2022 and 2025. As of the end of October 2025, the number of verified double-tap strikes had doubled compared to all of 2024.



The number of verified double-tap strikes.⁷⁹ Source: Truth Hounds.

This trend coincided with Russian sources openly describing the advantages of double-tap strikes by Russian forces.⁸⁰ For example, on August 4, 2024, Mikhail Zvinchuk, a leading Russian military expert and former Russian Ministry of Defense employee, stated on his Rutube⁸¹ channel that the Russian military had begun to take into account the arrival time of emergency services when planning attacks:⁸²

“

Initially, there were three strikes at the facility [the Hnivan special reinforced concrete plant—ed.], and after firefighters arrived on site, a fourth Geran [a long-range kamikaze drone—ed.] flew in, hitting the tank itself. This indicates that we are changing our approaches to strikes: we set aside time for putting out fires and [...] the arrival of evacuation teams, which often primarily consist of Ukrainian [military] formation representatives. Before, we could only dream of something like that. Now, on the other hand, we see a practical result.”⁸³

Witnesses interviewed by Truth Hounds also report an intensification of double-tap strikes in 2024. For instance, a journalist who was injured during a double-tap strike in Kharkiv on April 4, 2024 that killed three SES emergency responders shared:

“

“After [the incident], double-tap strikes happened quite often, both in the city and in the Oblast. Because of this, I made a point of not going to the strike site immediately but instead waiting for a while [...].”⁸⁴

About 85%⁸⁵ of double-tap strikes occurred in frontline areas of Kherson, Kharkiv, Dnipropetrovsk, Donetsk, Zaporizhzhia, and Sumy Oblasts.

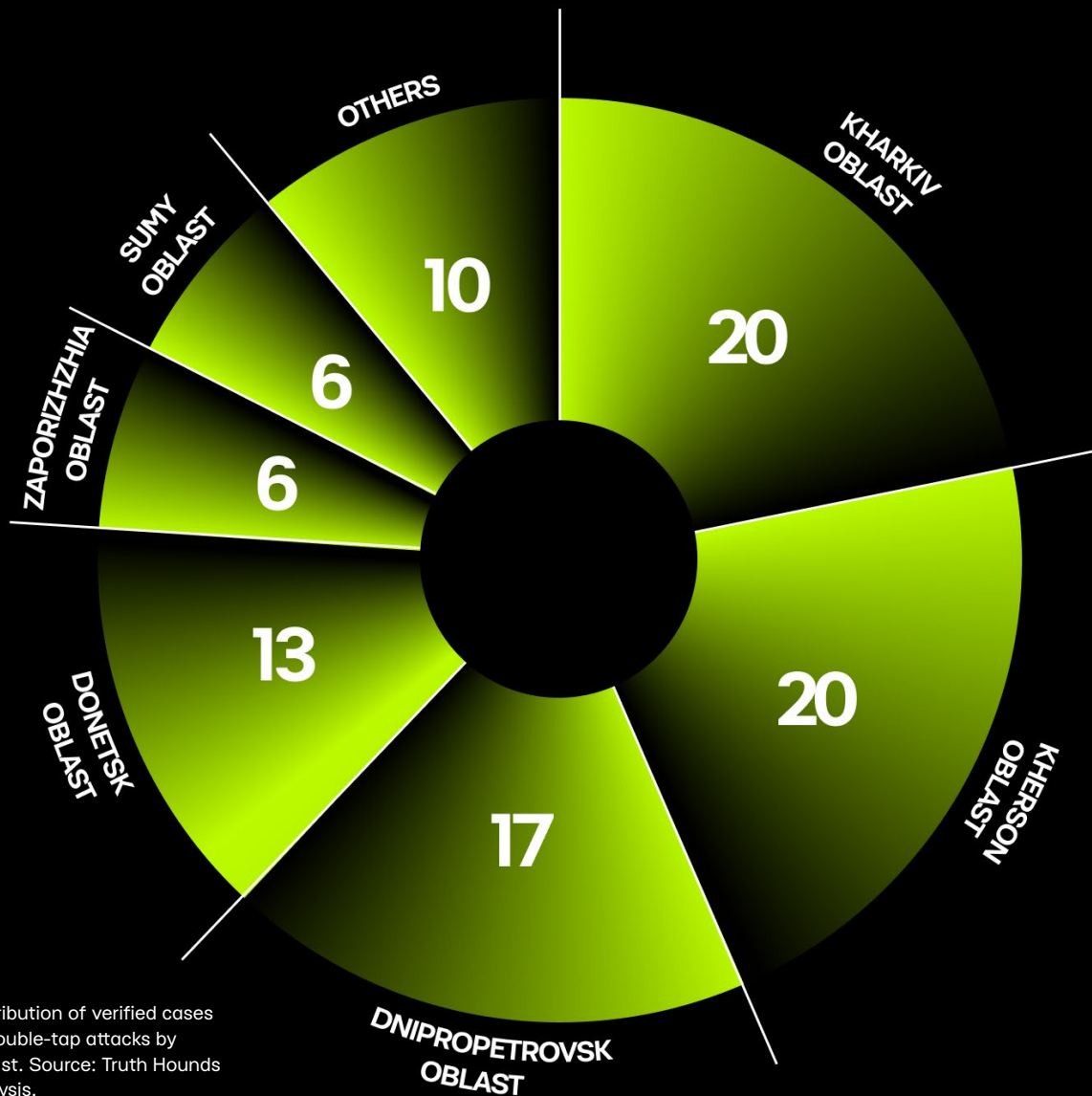
At the same time, 14 verified double-tap strikes occurred in areas relatively removed from the frontline, in particular in Khmelnytskyi and Starokostiantyniv (Khmelnytskyi Oblast), Odesa and Pavlivka in Bolhohrad raion⁸⁶ (Odesa Oblast), Bakhmach (Chernihiv Oblast), as well as in Kalynivka in Fastiv raion (Kyiv Oblast).

According to our data, as of October 31, 2025, verified double-tap strikes led to the deaths of 20 emergency responders, with another 108 injured. In addition, 76 emergency operations vehicles and 3 fire stations were damaged or destroyed.

⁸⁴ Truth Hounds interview with RE-017.

⁸⁵ These data apply both to verified cases and suspected cases.

⁸⁶ Raion is an administrative division in Ukraine that is smaller than oblast but larger than a hromada.



Distribution of verified cases of double-tap attacks by Oblast. Source: Truth Hounds analysis.

A double-tap attack in a village in Kharkiv Oblast in summer 2023⁸⁷

In summer 2023, a Geran-2 suicide drone hit a two-story building in a village in Kharkiv Oblast. The incident occurred less than one kilometer from the fire station. Within 30–40 minutes after emergency responders arrived at the scene, a second attack occurred using the same type of weapon. Below is a quote from an emergency responder injured in the second attack.⁸⁸ Truth Hounds documenters recorded the interview in the fall of 2025.



"I was working on a ladder. My colleague Andrii⁸⁹ was handing out fire hoses. Within 20 minutes everything was doused, everything was fine. Two other colleagues were working on the other side. Suddenly I hear them shouting: "A second one is flying, it's a Geran!" The guys who were together quickly climbed down the ladder. There were four of us on the other side. The Chief of the Guard, who was also on the ladder, and another firefighter made it.

Andrii and I wanted to go down. Andrii's [uniform] got caught on the ladder—I was adjusting his pants—and at this moment, the drone flew down at us. I didn't expect to survive, that this would happen to me. I opened my eyes and didn't understand where I was or what was happening. Then my colleagues said I was "switching off" [passing out—ed.] every two seconds. [...]

Andrii was killed. Another man suffered minor injuries. There were police in the building hit by the drones.

I was on sick leave for about five months. After the injury, I returned to work, not as a firefighter, but as an operator, because I can't do much physical activity."

⁸⁷ We collected data on the attack during a field mission in Kharkiv Oblast in the fall of 2025; Truth Hounds interview with RE-026.

⁸⁸ The text has been edited for linguistic and stylistic reasons. Its meaning remains unchanged.

⁸⁹ Name changed for security reasons.

In over 55% of verified cases, attackers used drones of various types for the second strikes. Artillery was the second most commonly used weapon. We also recorded 11 incidents involving ballistic or cruise missiles.

The verified data shows that attackers began using drones much more often for repeat strikes in 2024. The number then peaked in the third quarter of 2025, with 15 verified incidents.⁹⁰

In some cases, drones served not only as a means of a second attack, but also as a reconnaissance tool for confirmation of the arrival of emergency services at the scene.

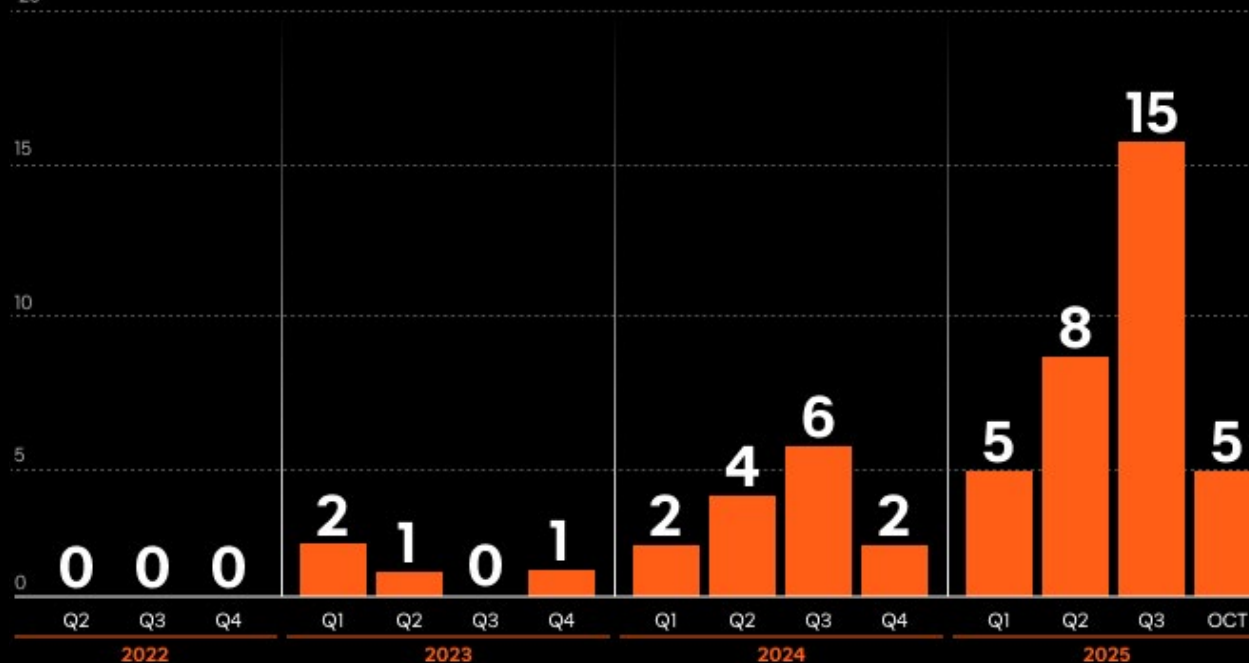
For example, on July 13, 2024, a Russian 9M723 missile hit military equipment in the village of Budy, Kharkiv Oblast. Approximately half an hour after the first attack, when emergency services arrived, a second 9M723 missile strike occurred. That second strike killed Artem Kostyria, head of the Kharkiv District Department of the State Emergency Service in Kharkiv Oblast, and police officer Oleksii Koshchii. In addition, at least 25 people were injured, including two children.⁹¹

On the same day, the Russian Telegram channel Zvezdanews published a video of the attacks, likely recorded by an Orlan-10 reconnaissance drone, which clearly shows emergency responders putting out the fire.⁹² This footage indicates that the attackers had confirmed the presence of emergency responders at the scene before launching the missile.⁹³

Kamikaze drones with FPV technology provide full visual control over a strike site and have high maneuverability, allowing for multiple-shot targeting and hitting moving targets.⁹⁴ A driver for a local firefighting unit in a village in Mykolaiv Oblast, interviewed by Truth Hounds, shared an incident he survived on May 13, 2025. A drone struck first before the firefighting team arrived. When he and fellow responders reached the site, another drone appeared and repeatedly tracked their movements. They tried to withdraw several

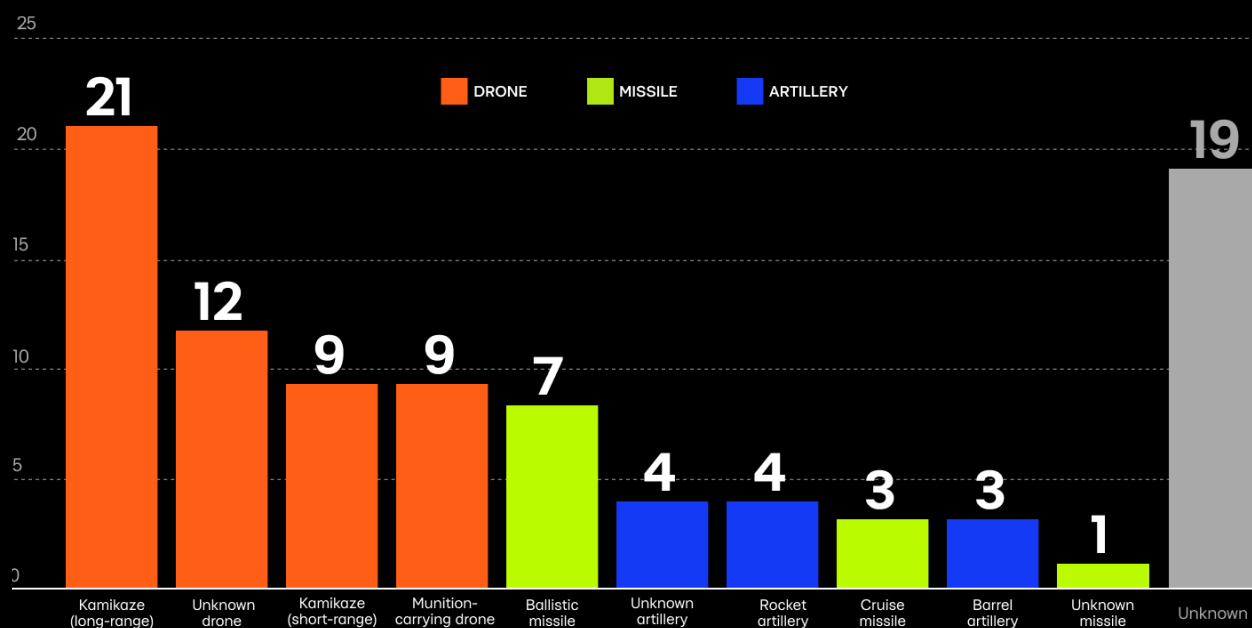
⁹⁰ Twenty-eight, including suspected incidents. Since only full quarters were included in the analysis, data for the first quarter of 2022 and the fourth quarter of 2025 are not shown in the graph.

⁹¹ We analyzed this case in detail in the previous report, [Cruelty Cascade: Examining the Pattern of Russian Double-Tap Strikes in Ukraine](#).



Trends in the use of drones for the second strike (excluding the first quarter of 2022 and the fourth quarter of 2025).

Source: Truth Hounds analysis.



Distribution of verified cases of double-tap strikes by probable weapon type. Source: Truth Hounds.

times, while the drone circled and followed them. He recalls the incident:⁹⁵



"I shouted, everyone dropped to the ground, and the drone flew overhead towards the river. I looked, and it made a U-turn at the river. First we ran away from the car towards a fence and went down. We thought it would hit the fire truck, and then, when it flew past, we started wrapping up, and it flew overhead again. At this moment, we turned the truck around—we were on foot, the driver was in the truck—and the drone headed towards us again. The truck left from that place, the three of us [my colleagues and I] walked away. It was above us again, on the fourth try. When we had removed the truck, it made a sharp U-turn to the place where it had just been parked—50 meters give or take—and hit that very place. We then ran 200–300 meters away from there. It circled to take aim. [...] We ran away, and the debris flew towards us. [...] Then we came back and put out the fire."⁹⁶

The increasing use of operator-controlled reconnaissance and attack drones to carry out double-tap strikes indicates that those responsible are aware of the presence of emergency services with clearly visible insignia on site and therefore may point to deliberate attacks on them.

2.2.3. The logic and impact of double-tap strikes in Ukraine

Approximately 85% of verified double-tap strikes occurred in frontline areas.⁹⁷ We recorded the highest numbers in the cities of Kherson (11 cases), Nikopol, and Kharkiv (7 cases each), which, due to their proximity to the front, experience daily attacks of various types. At the same time, we recorded 14 incidents in towns farther from direct hostilities at the time of the attack. These geographic differences in the concentration of

⁹⁵ Since this incident was not mentioned in open sources, it was not included in either the list of verified double-tap strikes or the expanded list of incidents that have characteristics of double-tap strikes, and therefore was not included in the calculations. This once again demonstrates that the real number of double-tap strikes may be significantly higher than the estimates we have recorded based on open-source monitoring.

double-tap strikes may indicate that they serve different purposes depending on the location.

In a majority of incidents we identified and verified in frontline areas, military facilities or dual-use objects were most likely not the primary targets

Instead, strikes were directed at residential buildings, warehouses storing agricultural products,⁹⁸ medical facilities,⁹⁹ and similar civilian objects, as well as at emergency responders who arrived to provide assistance and subsequently became targets of follow-up strikes. According to a SES staff member who was injured in a double-tap strike on a village in Kharkiv Oblast, the prevalence of this tactic in frontline areas has increased over the past two years:



"Near the combat zone, if you arrive after a strike, there's a 99% chance there will be another strike, just like what happened to me in 2023. Since then, there have been a lot of such cases."¹⁰⁰

An emergency responder from a volunteer fire-fighting unit in a village in Kharkiv Oblast told Truth Hounds that although he has not personally come under double-tap strikes, he often feels anxiety about them:



"There's a constant sense of nervousness when you hear it flying overhead and then it hits somewhere, and you're out on a call, working. You can't take cover quickly, because you only have a few seconds."¹⁰¹

The danger posed by double-tap strikes is also clear from the new safety protocols emergency responders have adopted. These include mandatory helmets and body armor, designated staff to warn of possible attacks at incident sites, the use of drone detectors and electronic warfare equipment, traveling in armored vehicles, and more.¹⁰² For example, a volunteer from a rapid response unit of the Kharkiv branch of the Ukrainian Red

Cross told Truth Hounds about changes in on-site coordination with the SES linked to the danger of follow-up strikes:



“Often, when we’re working with the SES, [...] we hear about the threat of double-tap strikes. Then the work stops, and we move to shelter until it passes. [...] A follow-up attack can happen in 30–40 minutes, or sometimes after several hours—it varies. [...] Unfortunately, we don’t have a flight schedule for drones and missiles. The only thing that saves us is a radio warning about the threat of a follow-up attack.”¹⁰³

The need to wait out the threat of double-tap strikes greatly complicates emergency response operations, especially the rescue of people trapped in the midst of fires or under debris. This likely results in deaths and injuries that could have been avoided, as well as substantial property damage.¹⁰⁵ In addition, such delays may cause panic and undermine trust in emergency services among civilians who, after coming under attack, may not receive adequate assistance in a timely manner.¹⁰⁶



“During attacks, thoughts arise that no one will help you, especially if you’re trapped under rubble. [...] There was a case when people [civilians—ed.] put out their own two-story house themselves: they had fire extinguishers and water. [...] Later they said that either no one came because it was too dangerous, or responders went to another location where there was also a fire,” a journalist covering shelling in Kharkiv Oblast told Truth Hounds.¹⁰⁴

In four verified cases in areas relatively removed from the front, the initial strike likely targeted military sites or dual-use objects,¹⁰⁷ while follow-up strikes occurred after the arrival of emergency services. This, under certain conditions, may

¹⁰⁷ Dual-use objects may include bridges, highways, civilian airports, and other facilities that, by their nature, location, purpose, or actual use, are capable of making an effective contribution to military operations. Attacks on such objects can be considered lawful only if the conditions prescribed by international humanitarian law are met and require individual legal analysis under the lens of Article 52(2) of Additional Protocol I.

align with the strategic logic of these attacks, where the “double-tapping” is intended to inflict maximum damage on the primary target, which may be a lawful military objective. In this context, emergency responders may be perceived as an obstacle, as they assist in mitigating the consequences of shelling.

Such logic, however, does not justify the use of a double-tap tactic. Working at military facilities, cooperating with the military or working under their direction, or assisting combatants who are *hors de combat* does not strip civil defense personnel of the protection afforded to them under IHL, provided they act within the scope of their civil defense tasks.¹⁰⁸ Furthermore, attacks on certain military targets, such as ammunition depots, can have negative consequences not only for defense forces but also for civilians nearby, causing large-scale fires, releasing toxic substances into the air, uncontrolled detonations, and the scattering of munitions. These challenges can be properly managed only by qualified civil defense personnel with appropriate equipment. Also, emergency responders may often be unaware of the civilian or military status of the sites where they are deployed until they arrive on location. This, nonetheless, does not change the humanitarian nature of their work. Accordingly, directing attacks against emergency responders who are acting within the scope of their civil defense tasks would likely amount to war crimes. This conclusion is not affected by the lawfulness of the initial strike, as emergency responders are civilians who must not be the object of attack.¹⁰⁹

An anonymous SES emergency responder who came under a double-tap strike while working at a military facility in central Ukraine told Truth Hounds that he believed the repeat strikes that day aimed specifically at emergency services rather than the military:



“These were deliberate—three separate attacks with a significant gap of 25–30 minutes apart. The intent was that firefighters and medics would arrive—that is, not military personnel, but unarmed people who, nevertheless, are now extremely in demand and highly valuable

specialists. I think all of this was calculated in advance [...]”¹¹⁰

A similar incident occurred on September 20, 2025, in the city of Bakhmach, Chernihiv Oblast. The initial strike targeted an oil depot, a dual-use facility. Approximately 10-15 minutes after emergency responders from the 14th State Fire and Rescue Unit arrived at the scene, a follow-up strike by a long-range kamikaze drone occurred, injuring two SES emergency responders. Roman Lysun, one of the injured emergency responders, was thrown by the blast wave into a body of water on the depot’s premises. He told the online media outlet Suspilne Chernihiv, that he believed the attack was deliberate:

“

“Everyone understands that emergency responders will be the first to arrive and do their duties. Everyone understands that. And the follow-up strike—it’s not accidental”.¹¹¹

The non-random nature of attacks specifically on emergency responders is also evidenced by publications in Russian sources. For example, on September 28, 2025, the Telegram channel Frontovaya Ptichka, which is purportedly run by a field officer of the Russian Airborne Forces, published a video of the attack in Bakhmach and wrote:

“

“If you’re going to put out a base that supplies the army, be prepared for it to be hit again. Those few seconds of flight over his head—he [the emergency responder—ed.] will remember them for a long time.”¹¹²

The structured nature of double-tap strikes, combined with other factors that complicate emergency response operations, such as the destruction of fire stations or the advance of the frontline, may play a decisive role in decisions to suspend emergency services in certain areas. Such suspensions leave the local population more vulnerable to conflict and nonconflict-related emergencies, but also further erode any remaining sense of normalcy in frontline areas.

2.2.4. Conclusion

Double-tap strikes are a military tactic aimed at undermining emergency response efforts during the response to armed attacks, causing chaos, and disrupting everyday civilian life. In the context of Russia’s full-scale invasion, this tactic has caused extensive destruction and human losses, claiming the lives of at least 20 emergency responders and injuring over a hundred more.

Since 2022, the number of documented double-tap strikes has increased every year. As of the end of October 2025, it has reached a historic peak. While various factors may contribute to this trend, including improved media coverage, it nonetheless points to an alarming pattern in which emergency responders have become routine victims.

The overwhelming majority of incidents verified by Truth Hounds occurred in frontline areas. The constant threat of follow-up strikes has forced emergency responders to revise safety protocols and develop new self-protection practices. However, the need to suspend or delay emergency response operations due to the risk of double-tap strikes creates additional threats for civilians, reducing their chances of receiving critical assistance in a timely manner.

When such strikes become systematic, as they have in frontline localities in Ukraine, their impact may extend far beyond the immediate physical harm to emergency responders, civilians, and infrastructure. In such cases, they may function as a tool of terror, creating fear and hopelessness that undermines civilians’ ability to receive rescue and care without delay.



Photo:
Pavlo Petrov

2.3. Attacks on fire stations



"WHEN EMERGENCY SERVICES LEAVE THE CITY, IT'S A SIGN THAT THERE IS NO HOPE."¹¹³

A journalist from Kharkiv Oblast, in an interview with Truth Hounds

In this section, we analyse Russian attacks on fire stations and other SES facilities. A fire station in Ukraine is an operational base of a state, local, or volunteer fire and rescue unit within the civil protection system, where personnel are stationed, equipment and vehicles are kept, and crews deploy to fires, rescue operations, and other emergencies. Fire stations, at times, also act as civilian shelters during attacks and power supply hubs during power outages.

Between February 24, 2022 and October 31, 2025, we identified 138 incidents that resulted in damage to or the destruction of such buildings. This analysis is based primarily on Truth Hounds' open-source monitoring, supplemented by information on six additional incidents provided by law enforcement agencies.

According to official SES statistics, as of October 31, 2025, 415 civil defense facilities have been damaged since the beginning of Russia's full-scale invasion, while a further 34 have been destroyed beyond repair. For the purposes of this section, we rely mainly on our own dataset and on data received from law enforcement agencies, as these sources provide a greater level of detail and allow for more precise identification and analysis of patterns. At the same time, we have grounds to believe that the actual scale of armed attacks on fire stations and other SES facilities is closer to the figures reported in the official statistics and may even exceed them.¹¹⁴

¹¹⁴ The possible reasons for differences in the figures between the TH and the SES data are explained in detail in the Methodology.

¹¹⁵ For security reasons, access to the database containing the identified geolocations of damaged or destroyed rescue facilities can only be provided upon request.

2.3.1. Note on subchapter methodology

For this section, we developed a methodology that not only records incidents involving damage or destruction of fire stations, but also assesses the circumstances and consequences of each attack in a systematic way, primarily using open-source data. The goal was to disaggregate and organize the information so we could better understand the context of each incident, identify patterns, and assess the likely intent behind the attacks.

First, a team of eight Truth Hounds monitors established the geolocation of each damaged or destroyed fire station, relying on open sources whenever possible.¹¹⁵ After that, two researchers worked independently to verify the identified geolocations and, based on incident descriptions and news publications in online and social media, analyzed the following:

- Whether the fire station is marked as such on online maps (SES unit map, Google Maps, OpenStreetMap, Wikimapia, Yandex Maps, etc.);
- Whether there is publicly available information about the building's civil defense-related status;
- Whether there are stationary military facilities located within a 300-meter radius;
- Whether there is digital evidence (photos, videos, etc.) demonstrating the damage.

If digital evidence was available, researchers also determined the level of damage to the fire station ("moderate," "severe," "building destroyed")

according to clearly defined criteria.¹¹⁶ If there were discrepancies between researchers' assessments, these cases were discussed further, and the final assessment was established based on consensus. In the absence of digital evidence (for example, when damage to a fire station was only mentioned in the text of one publication) damage was classified as "possible."

The detailed data, source-reliability analysis, and assessment of the scale of damage provide a deeper understanding of attacks on fire stations in Ukraine. Furthermore, this allows for a preliminary assessment of the likely intentionality of these attacks (as opposed to cases of collateral damage) based on indicators such as the type of weapon used or the severity of the damage. This may form the groundwork for further legal analysis of specific incidents as serious IHL violations and for bringing the perpetrators to justice.

SES methodology for collecting and verifying data on damage or destruction of fire stations due to armed attacks

For this study, we conducted an interview with Viktor Likanov, Deputy Director of the Resource Supply Department and Head of the Construction and Operation of Movable Property Department of the SES. He explained their methodology for collecting and verifying data on damage or destruction of SES facilities due to armed attacks. The detailed and well-documented collection and verification process further supports the reliability of the information. The interview demonstrates the difficulties associated with collecting statistical information during an armed conflict, as well as with confirming the long-term effects of damage to fire stations near the frontline.



"If a location is damaged, its administration requests a damage assessment. This assessment is then recorded, entered into the registry, and a general picture of the damage inflicted emerges. At the same time, there are difficulties associated with the fact that damage is recorded only once, although, after the initial recording, the facility can suffer damage for a second or even a third time. Even so, the damage is still recorded, the object is examined, and the decision is made whether it can be restored.

As for statistics, [fire and rescue] units officially send letters regarding damaged property and equipment for statistical purposes. At the same time, operational information comes through operational duty officers.

The status of the facility, whether damaged or destroyed, is determined based on an expert appraisal following an examination. Experts also provide these assessments in the combat zone, if possible. The appraisals are stored directly with the [fire and rescue] unit to further estimate the cost of repairs or reconstruction.

Currently, this information is mostly just gathered, since facilities in the combat zone are repaired using what's available, focusing on priority measures, such as replacing windows, patching the roof, and so on. Engaging specialists and contractors in these areas is often difficult, and there are no guarantees that the facility will not be attacked again, which would mean a waste of government funds. Therefore, facilities located in the proximity of the frontline tend to be repaired by the units themselves. No major renovation work is currently planned at such facilities. Instead, statistical data are being collected to make decisions regarding actions in the future."

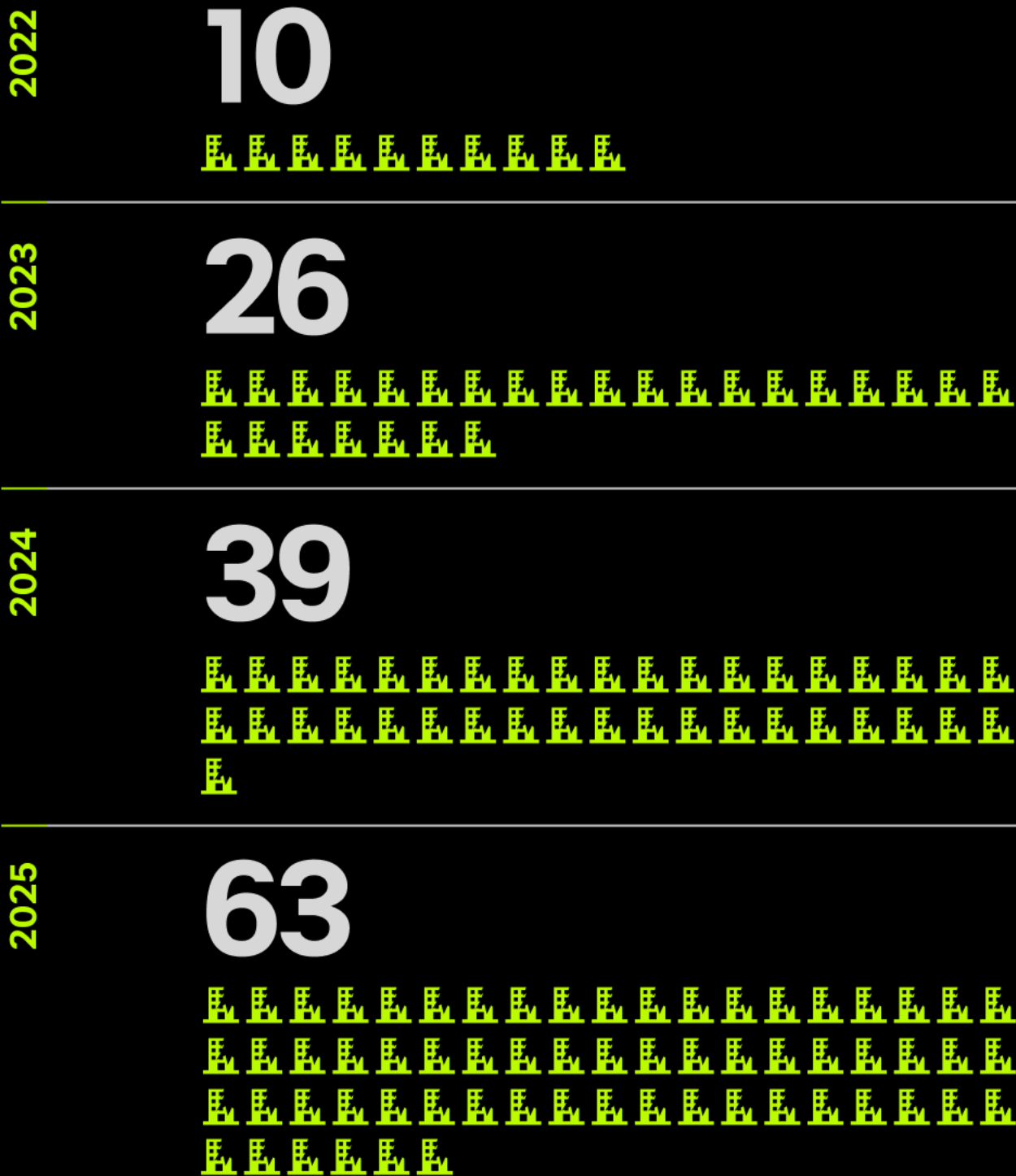
¹¹⁶ More details on the criteria are available in the Codebook for the Attacks on Rescue Buildings database, which is included in Appendix 2 to this report.

2.3.2. Geography, patterns, and consequences

We recorded the first ten incidents that resulted in damage or destruction of fire stations in 2022. Afterward, this number increased year after year, reaching 63 incidents within the first ten months of 2025.¹¹⁷

As in the case of double-tap strikes, the absolute majority of cases (85%) occurred in frontline areas or in areas with active hostilities.¹¹⁸ Namely, over 70% of the incidents occurred in Kharkiv, Donetsk, Dnipropetrovsk, and Sumy Oblasts.

¹¹⁷ Data as of October 31, 2025.



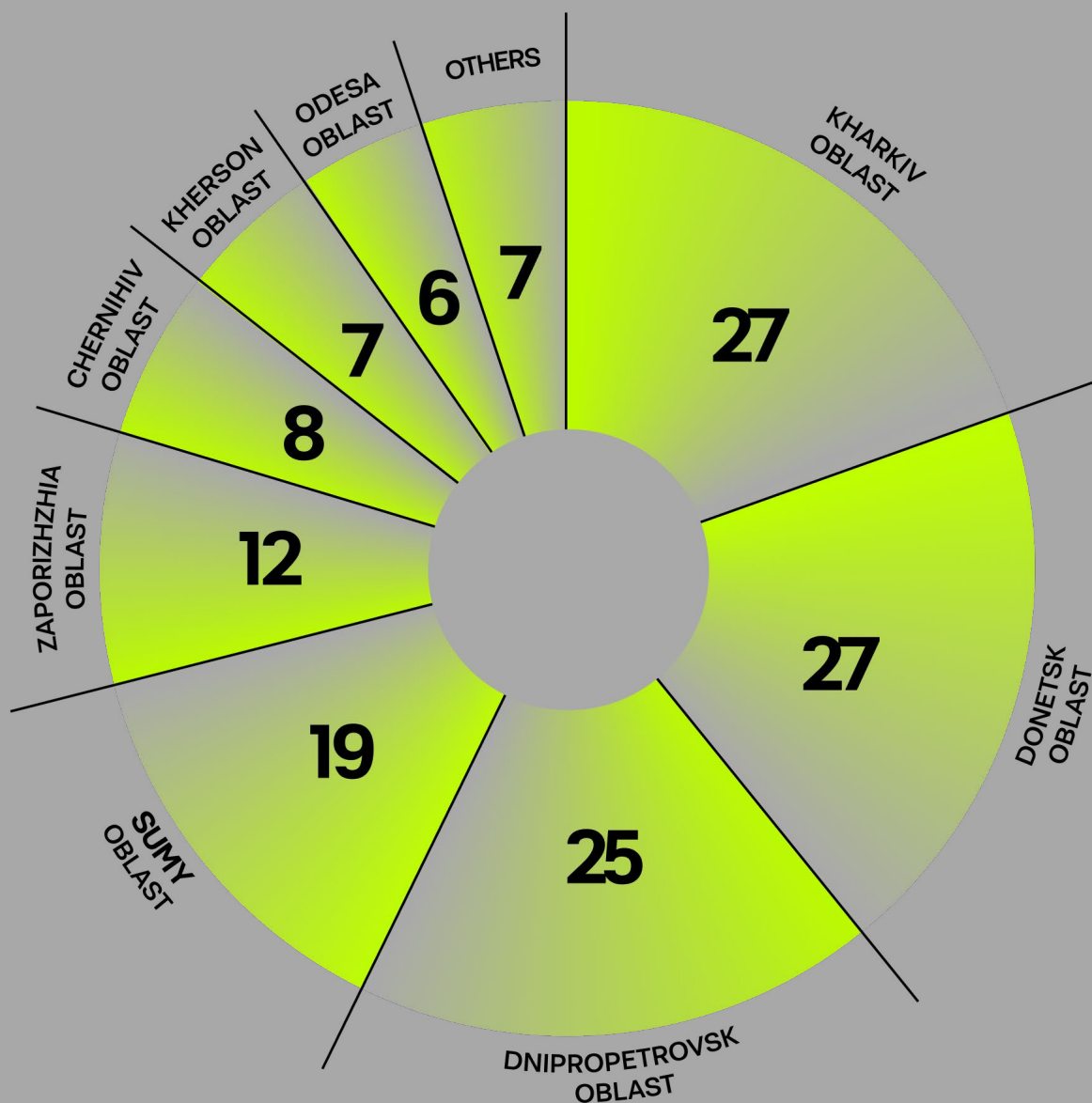
Among the localities where fire stations suffered from the greatest number of attacks were Nikopol in Dnipropetrovsk Oblast (12 incidents), Stepnohirs'k in Zaporizhzhia Oblast (8 incidents), and Kostiantynivka in Donetsk Oblast (8 incidents). All of these settlements were in close proximity (within approximately 50 kilometers) to Russian positions at the time of the attacks.¹¹⁹

Nikopol and Kostiantynivka are mid-size cities with pre-war populations of up to 100,000.¹²⁰ Stepnohirs'k is a small town with a pre-war population of about 4,500 residents.¹²¹ According to the SES, in

Nikopol and Stepnohirs'k, until recently there was one state fire and rescue unit in each. In Kostiantynivka, on the other hand, until the deterioration of the security situation in 2025,¹²² two state fire and rescue units and one local firefighting unit were likely in operation.¹²³ This means that in every case, the same building likely faced multiple attacks. In general, repeated damage to the same facilities was recorded in more than a third (33%) of all cases. **Viktor Likanov** from the SES told us that attacks damaged some fire stations 3–5 times over the course of the full-scale invasion.¹²⁴

DISTRIBUTION OF INCIDENTS THAT RESULTED IN DAMAGE OR DESTRUCTION OF FIRE STATIONS BY OBLAST

ACCORDING TO TRUTH HOUNDS DATA



Double-tap strike on the fire station in Stepnohirsk, Zaporizhzhia Oblast¹²⁵

On the morning of June 2, 2025, the Russian military carried out two consecutive attacks on the fire station in the Stepnohirsk, Zaporizhzhia oblast. The first attack damaged the shelter door and injured the emergency responders inside. While a vehicle was being prepared for evacuation, a second strike followed, injuring more people and causing further damage.¹²⁶

On the way to the medical stabilization point, two fire trucks transporting the injured came under fire twice, first from a drone near the village of Prymorske, and then before the bridge to the village of Hryhorivka. The second strike damaged the front wheel of one vehicle, which hampered the evacuation.

In total, 12 emergency responders were injured in the attacks, most of whom suffered blast trauma, brain injuries, and concussions.¹²⁷ Due to the significant damage, the operation of the fire station—the only one in town—was forcibly suspended, and the personnel were relocated.¹²⁸

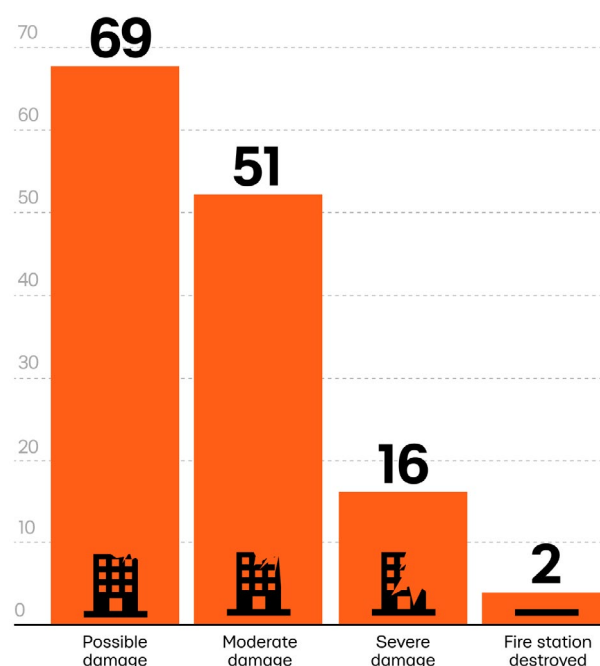


Photo of the fire station damaged following attacks in Stepnohirsk on June 2, 2025. Source: State Emergency Service in Zaporizhzhia Oblast.¹²⁹

¹²⁵ In total, we identified six incidents when the double-tap tactic was used on the territory of fire and rescue units. They can be found in the Attacks on Fire Stations database, which is included in Appendix 3, using the filter in the "Double-Tap" column.

Attackers used various types of drones in more than 35% of cases and rocket and barrel artillery in 22% of incidents. Various types of missiles likely featured in 14% of incidents. In the remaining cases, the type of weapon used is unknown.

The incidents in our analysis resulted in the deaths of at least six emergency responders, injuries to 61, and damage or destruction of 86 emergency operations vehicles. In over 35% of cases, moderate damage was recorded (broken windows, damaged wall coverings, etc.). In 12% of cases, the fire stations were found to have suffered significant damage (part of the walls, ceilings, etc. were destroyed). In two cases, in Mykolaiv on October 13, 2022,¹³⁰ and in Kupiansk on May 3, 2025,¹³¹ we concluded that the buildings were completely destroyed. In approximately 50% of cases, the level of damage could not be established due to insufficient digital evidence.¹³²



Distribution of incidents that resulted in damage or destruction of fire stations by damage level. Source: Truth Hounds.

In about 60% of cases, we identified no stationary military facilities within 300 meters of the damaged fire stations. In approximately 9% of cases, dual-use infrastructure, such as railways, gas stations, and oil depots, was located nearby, attacks on which may be justified under IHL under certain circumstances.¹³³

¹³² Overall, there was digital evidence of damage in approximately 53% of incidents. Most of it was provided by official sources (SES, MIA, local administrations, etc.).

¹³³ API Art. 52(2).

In about 12% of cases, according to open sources, stationary military facilities may have been located in the immediate vicinity of the damaged fire stations. At the same time, most of these cases (11 out of 16) occurred in Nikopol, where, according to online maps, the building of the local military recruitment center used to be located.¹³⁴ However, according to information from our sources, the recruitment center has not been operating at this address since approximately mid-2023.¹³⁵ That said, all the previously mentioned attacks resulting in damage to the fire stations took place in 2024 and 2025.

Excluding incidents in Nikopol since mid-2023, the percentage of cases where we identified stationary military facilities near the attacked fire stations drops to about 3%. This suggests that in a significant number of incidents, fire stations could not have easily been mistaken for military facilities and may have been the primary targets of attacks. At the same time, additional analysis would be necessary to form more reliable conclusions about the intentionality of such attacks.

2.3.3. The logic and impact of attacks on fire stations in Ukraine

Fire stations serve as essential hubs for emergency responders and civilians. Since the beginning of Russia's large-scale attacks on critical infrastructure in October 2022, fire stations have often performed the function of "Invincibility Points," places where civilians could come in case of long power outages to warm up, receive psychological support,¹³⁶ get access to power, mobile connection and the Internet, charge phones, etc.¹³⁷ In addition, if there is a suitable shelter, fire stations may also be used by the population during air alerts or shelling.¹³⁸ In some cases, fire stations in frontline cities became a temporary residence for emergency responders who lost their homes due to shelling or occupation.

¹³⁴ A Territorial Center for Recruitment and Social Support is a military management agency in Ukraine that carries out military accounting and the military draft.

¹³⁵ Truth Hounds sources.

¹³⁶ Written SES response to an information request by Truth Hounds (January 7, 2026).

¹³⁷ According to Serhii Kudin, Deputy Director of the Civilian Protection Activities Department of the SES, achieving this response time would require an additional 1,307 local and voluntary firefighting units.



"I am a local myself, from the village of Verkhniokamianske (Bakhmut raion in Donetsk Oblast—ed.). The village is no longer there, so I live at the fire station (47th State Fire and Rescue Unit of Bakhmut—ed.). I left my wife and child in Chernivtsi, let them live in peace and quiet, and I came here to help the guys," said **Mykhailo Tymchak**,¹³⁹ commander of the Bakhmut emergency response unit, in his interview with Slidstvo.Info.

Thus, fire stations are places that can serve as shelter and a safe space both for rescue personnel and for other civilians during the war. According to Ukrainian legislation, the number and location of fire stations must ensure that a crew can arrive at the scene of an emergency within 10 minutes of the call within the locality and within 20 minutes outside the locality.¹⁴⁰ Typically, the larger the city, the more fire stations. Furthermore, additional fire stations can be located next to large industrial facilities where the risk of man-made emergencies is inherently higher. Individual small towns and villages may not have their own units, relying on neighboring ones instead.

As of December 2022, there were 876 state firefighting units operating in Ukraine.¹⁴¹ In addition, as of October 31, 2025, there were 1,034 known local and 1,177 voluntary firefighting units operating.¹⁴² The number of units approximately indicates the number of fire stations. This was insufficient to maintain the 10–20 minutes arrival standard even in peacetime.¹⁴³

This indicates that, given the size of the country, the population, and the gravity of the threats to rescue personnel, the number of fire stations is very limited, and the workload, especially near the frontline, is extremely high. Thus, when they stop operating, the impact on the local population can be severe. In small towns, this may significantly delay emergency responders' arrival and increase the danger to people who need immediate help. Furthermore, it can undermine the autonomy of communities that could previously rely on their own staffed and equipped emergency response teams, forcing them to depend on units in neighboring communities. Given these factors, targeted

attacks on fire stations not only cause extensive devastation, destroy valuable equipment and machinery, and result in the loss of highly qualified personnel, but also severely undermine community resilience, particularly in war-affected areas, by hindering emergency responses and intensifying the chronic sense of vulnerability and insecurity.

In addition, emergency response units in Ukraine are mainly subordinate to state authorities, and therefore represent one of the links of interaction between state institutions and the local population. According to a November 2025 study by the Razumkov Centre,¹⁴⁴ the SES has the highest level of citizens' trust after the Armed Forces of Ukraine (AFU) at 86%.¹⁴⁵ Thus, physical destruction of fire stations as places providing one of the key government functions—rescue and protection—weakens the institutional presence of the state on the ground and may exacerbate the population's sense of abandonment and despair. This is especially true for frontline areas, where the ability to provide state services is already complicated by the difficult security situation. According to Lisa Hultman's research on the strategic use of violence against civilians, undermining people's faith in the government's ability to provide protection may be one of the intended outcomes of the attacks, causing "war fatigue" among the population and exerting pressure for concessions, negotiations, or surrender.¹⁴⁶



"I remember there was a story in Kupiansk [...] when rescue personnel could not come and check for people under the rubble for five days. [...] That is, the security situation makes it simply impossible for emergency responders to get to the place of emergency, let alone start a rescue operation. This inability to provide assistance leads to accusations—not always towards Russians; people rather start with their own government, which urges them to evacuate from unsafe areas," shared a journalist from Kharkiv.¹⁴⁷

As the frontline creeps closer, when the intensity of attacks and hostilities nearby grows and the humanitarian situation reaches critical levels, emergency responders are among the last peo-

ple to leave localities. In heavy protective gear, often in armored vehicles providing additional shielding from constant dangers, they evacuate civilians, deliver food and water, and put out fires, including those caused by daily shelling. For locals who choose to remain in their homes despite the security risks, emergency responders' assistance under such circumstances becomes not just important but critical for their survival.

Under these conditions of chronic danger and uncertainty about the developments on the frontline, the intentional destruction of fire stations may become a decisive factor for the relocation of emergency responders and full termination of emergency response efforts. In localities where kindergartens, schools, hospitals, stores, post offices, and other essential services have long ceased operations, the departure of emergency responders can lead to a significant reduction or even complete loss of the emergency rescue capacity. This absence may signal that the area no longer functions as a place of civilian life and could soon become a battlefield. The main hostages and victims of such circumstances are always civilians who, for various reasons, are unwilling or unable to evacuate.¹⁵⁰

Withdrawal of the SES unit from Kostiantynivka as a result of significant damage to the fire station

On the morning of August 26, 2025, the Russian military attacked the city of Kostiantynivka, Donetsk Oblast, twice, with aerial bombs.¹⁴⁸ This resulted in damage to the fire station. According to the SES, the blast wave damaged the garage door, four front doors, and the slate roof, broke the glass in nine window blocks, and destroyed the protective plates on 35 windows. A fire truck also suffered damage.¹⁴⁹ According to Truth Hounds monitoring, this fire station had been previously damaged multiple times.

Shortly after the incident, photojournalist Diego Herrera posted a video of the SES unit's withdrawal from Kostiantynivka on his Instagram page. In the video caption, he wrote:

¹⁴⁴ The Oleksandr Razumkov Ukrainian Centre for Economic and Political Research (Razumkov Centre) is a Ukrainian non-governmental think tank that conducts research in the spheres of politics, economy, security and defense, and public relations.

¹⁵⁰ At the same time, even if rescue crews leave a certain locality, the SES continues to provide limited services, such as evacuation of civilians, as long as possible. Such operations are extremely risky for rescue personnel.

“

“The last departure of the fire truck from Kostiantynivka. Russia bombed the fire station twice within a week, the last time with a [high-capacity aerial] bomb. The city is fading away, and due to the continuous bombings, it will burn, and, unfortunately, no one will be able to put it out.”¹⁵¹



Photo of Kostiantynivka emergency responders next to a fire truck. Source: Diego Herrera.¹⁵²

2.3.4. Conclusion

Fire stations have been subjected to attacks since the very beginning of the full-scale Russian invasion. The number of such incidents has increased each year, reaching 61 cases for the first ten months of 2025. The vast majority of the affected buildings were located in frontline areas. Open sources, including online maps, official SES and municipal websites, and social media, often identified these facilities as civil defense sites, and many were struck repeatedly, which may further suggest intentional targeting.

Fire stations also generally displayed appropriate insignia, and clearly visible bright red fire engines were sometimes parked on the premises. The availability and level of detail of this information in open sources suggest that the attackers could not have failed to distinguish these facilities from other objects or to take into account the likelihood of damaging them when deciding to strike. The use of the double-tap strike tactic in at least six cases involving fire stations may further point to intentional targeting. This conclusion is reinforced by the widespread use of FPV drones, which allow operators to observe their targets in real time.

Attacks on fire stations not only undermine emergency response by damaging premises, equipment, and personnel, but also jeopardize the long-term resilience of communities facing the complex challenges of war. Such attacks may be intended to demoralize civilians, exacerbate forced displacement, and, in combination with other measures, pressure the adversary's leadership into making political and military concessions.¹⁵³

Attacks on White Helmets civil defense centers during the civil war in Syria

Ukraine is not the first conflict marked by attacks on civil defense centers. A similar pattern emerged during the Syrian civil war. Between 2014 and 2023, the former Investigation and Investigation Support and Case-building Unit of the White Helmets Foundation recorded approximately 89 incidents involving possible attacks on civil defense centers, which likely resulted in 79 deaths and 98 injured.¹⁵⁴ Below is an example of such an attack from the most recent White Helmets study, *Double-tap attacks against White Helmets volunteers*.¹⁵⁵

“

“On 26 December 2017, several airstrikes targeted the residential area of Mazra'at al-Azizyeh in Khan Shaykhoun at around 10:20 local time, killing at least two brothers and injuring five more civilians, including children. White Helmets volunteers in uniform from the Khan Shaykhoun SCD center and the surrounding area rushed to rescue the victims. Photographs of the location also show the extent of the damage to civilian residences.

Between 12:45 and 13:52 local time, a series of attacks took place against the SCD centre and killed one White Helmets volunteer, Bashar al-Dedo.

Later in the afternoon, airstrikes hit civilian areas in Khan Shaykhoun and in nearby al-Latamneh, killing and injuring several civilians. Both locations would have fallen under the responsibility of the SCD centre in Khan Shaykhoun; however, the ISCU has not found information that White Helmets volunteers were able to respond to either of those incidents, presumably as they were still dealing with the aftermath of the attack against the centre.

¹⁵⁴ The level of data verification may vary; therefore, such figures should be treated with caution.

At the time, the city of Khan Shaykhoun was under the control of HTS¹⁵⁶ and roughly 10 kilometers from the frontlines. Al-Latamneh was also under HTS control but closer to the frontline with the regime forces.¹⁵⁷

Attacks on rescue facilities have also occurred in Lebanon and the Gaza Strip, among other places.¹⁵⁸ These events show both the widespread use of this tactic and the persistent lack of legal accountability for it. They also strengthen the case for international solidarity to punish the perpetrators and achieve justice for the victims, survivors and the families of those who lost their lives to save others.

¹⁵⁶ **Note:** HTS is a Sunni Islamist political organization with a paramilitary wing that actively participated in the Syrian civil war and played an important role in the overthrow of the Bashar al-Assad regime in December 2024.



The killing of Amer Al-Bunni, a 25-year-old first responder, by a Russian double-tap strike. 22 July 2019 – Maarat al-Numan Market Attack.

Source: The White Helmets

2.4. Attacks on emergency responders from the international humanitarian law perspective

This subsection briefly examines the attacks on emergency responders described above under IHL and, where relevant, under the Rome Statute. It does not provide a full legal assessment of the pattern or of individual incidents. Instead, it outlines possible approaches to their legal characterization to support further research and supporting analysis by competent investigative and law enforcement authorities.

2.4.1. Double-tap strikes

Under AP (I), civil defense organizations and their personnel must be respected and protected and may not be the object of attack while carrying out their protected civil defense functions.¹⁵⁹ AP (I) defines “civil defense” as the performance of humanitarian tasks intended to protect the civilian population against the dangers arising from hostilities or disasters, help recovery from their immediate effects, and to provide conditions for survival.¹⁶⁰

In Ukraine, the tasks performed by emergency responders clearly fall within this definition of civil defense.¹⁶¹ The Regulation on the SES and the Procedures of the Local and Voluntary Fire-fighting Units, define the work as implementing state policy in the civil defense sector, namely preventing emergencies, addressing their consequences, protecting the population and territory, and rescue work.¹⁶² Thus, the tasks of these services align with the tasks that fall within civil defense according to IHL.¹⁶³

Although provisions of Chapter VI of the Protocol are dedicated to the status of emergency responders under IHL, Article 62 of the Protocol

directly emphasizes that such individuals are subject to not only special provisions of but also all the norms of AP (I).¹⁶⁴ Thus, the classic rules regarding protection of civilians also apply to emergency responders.¹⁶⁵

In this context, the principle of distinction, obliging parties to an armed conflict to distinguish civilians from combatants and civilian objects from military objectives in all circumstances, is of key importance.¹⁶⁶ Article 51(2) of AP (I) directly prohibits attacks against civilians.¹⁶⁷ Emergency responders therefore benefit both from the specific protection afforded to civil defense personnel and from the general protections that international humanitarian law grants to civilians.

The armed forces of the attacking party must comply with the principle of proportionality.¹⁶⁸ According to AP I, Art. 51(5)(b), “an attack which may be expected to cause incidental loss of civilian life, injury to civilians, damage to civilian objects, or a combination thereof, which would be excessive in relation to the concrete and direct military advantage anticipated” would be considered indiscriminate.¹⁶⁹

Even where an initial strike is directed at a lawful military objective, the attacking party remains bound by the rules of distinction, precaution, and proportionality. Expected incidental harm to emergency responders and to civilian infrastructure used in rescue operations must be taken into account and may not be excessive in relation to the military advantage anticipated.

Protection ceases only if emergency responders are “used to commit, outside their proper tasks, acts harmful to the enemy.”¹⁷⁰ The word-

cates this exception applies only in narrowly defined and exceptional circumstances on clearly defined grounds.¹⁷¹ Even an analysis of AP I, Article 65, which concerns cessation of protection, supports a narrow reading of “acts harmful to the enemy.”¹⁷² The article does not define these acts exhaustively, but clarifies that certain conduct does not count as harmful and therefore does not terminate protection.¹⁷³ This includes carrying light weapons for maintaining order or self-defense¹⁷⁴ and performing civil defense tasks under the direction or control of the military.¹⁷⁵ For example, military personnel may be present during emergency operations¹⁷⁶ to warn responders of safety risks¹⁷⁷ or may direct them to carry out civil defense tasks at particular sites. In such circumstances, neither the physical presence of the military nor the performance of tasks under their direction or in coordination with them, by itself, deprives emergency responders of their protected status under IHL.¹⁷⁸ Therefore, the fact that emergency responders assist civilians affected by attacks, including attacks on military objectives, does not by itself transform them into lawful targets.

It is also important that emergency responders receive a warning and, whenever appropriate, a reasonable time limit to comply.¹⁷⁹ Their protection may cease only if, after such a warning, they continue to commit, or are used to commit, outside their proper tasks, beyond those protected under IHL.¹⁸⁰ Any such warnings should come from official authorities of the party to the conflict, not from unauthorized individuals.

In assessing whether emergency responders were intentionally targeted, relevant indicators may include their distinctive uniforms and vehicle markings, the predictability of their arrival at attack sites, and, in some cases, the use of means of attack that allow real-time observation. These factors do not by themselves prove intent, but they may strengthen an inference that attackers knew emergency responders were present and deliberately targeted them.

Thus, IHL builds a coherent system of protections designed to shield emergency responders from attack during armed conflict. Accordingly, where the evidence shows that emergency responders were intentionally made the object of attack while

protected under IHL, such conduct may constitute serious violations of IHL and, depending on the facts, may qualify as war crimes under Article 8(2)(b)(i) of the Rome Statute.¹⁸¹

2.4.2. Attacks on fire stations

In addition to protecting emergency responders as civilians, IHL applies protection to fire stations as civilian objects.¹⁸² In particular, AP (I) establishes a general prohibition on attacking civilian objects.¹⁸³ Fire stations are presumptively civilian objects and may not be made the object of attack unless they become military objectives under IHL.¹⁸⁴

As with individuals, the principle of distinction applies to objects.¹⁸⁵ Civilian objects are all objects that are not military objectives.¹⁸⁶ Rather, an object is a military objective only if, by its nature, location, purpose, or use, it makes an effective contribution to military action and its total or partial destruction, capture, or neutralization, in the circumstances ruling at the time, offers a definite military advantage.¹⁸⁷

The military nature of objects is usually fairly straightforward: this “comprises all objects directly used by the armed forces: weapons, equipment, transports, fortifications, depots, buildings occupied by armed forces, staff headquarters, communications centres etc.”¹⁸⁸

The criterion of location applies to objects which are not military in nature per se but gain military significance due to their location. Such objects include bridges, highways, railway junctions, etc.¹⁸⁹

It is also important to make a distinction between the purpose and the actual use of an object.¹⁹⁰ The purpose reflects an intended use of an object, while use characterizes the real role that the object plays at a specific moment in a military conflict.¹⁹¹ Thus, a civilian object may acquire military status if a party to a conflict uses it for military purposes.

Under Ukrainian law, fire stations serve civil-protection and emergency-response functions. They are intended to ensure that emergency responders are on standby¹⁹² round-the-clock,¹⁹³ and to

store fire trucks, emergency operations vehicles and equipment,¹⁹⁴ to receive and process information about emergency calls, and to perform other tasks.¹⁹⁵ Accordingly, their ordinary purpose is civilian in nature.

The civilian nature of the use of these facilities is indicated by their use as civilian shelters during air-raid alerts,¹⁹⁶ as well as power supply hubs during large-scale power outages.¹⁹⁷

The location of fire stations is based on the territorial arrangement¹⁹⁸ and depends on the population of the relevant locality.¹⁹⁹ Data available in open sources indicate that, in most cases, we identified no stationary military objectives within a 300-meter radius of the fire stations that were damaged or destroyed in attacks.²⁰⁰ This may support the inference that those fire stations retained their civilian character and did not qualify as military objectives at the time of attack.²⁰¹

A fire station could potentially lose its civilian status if it were actually occupied by a party to an armed conflict and were used, for instance, to house a military unit, as a command post or as a military equipment warehouse. In such a situation, the building would no longer perform a civil defense function but instead effectively contribute to hostilities and thus be classified as a military objective. However, based on open data, there is no indication to believe that the fire stations had lost their civilian status, as they did not acquire military nature by any of the four criteria of nature, location, purpose, or use.²⁰² Furthermore, the Russian side had to “do everything feasible to verify that the objectives to be attacked are neither civilians nor civilian objects and are not subject to special protection.”²⁰³ Any conclusions about the specific circumstances of each incident would require a detailed analysis of the evidence, which is currently only fully accessible to the Ukrainian law enforcement.

Thus, there is a presumption that fire stations meet all the criteria for civilian objects under IHL. Thus, deliberate attacks against them are presumptively prohibited according to AP (I), Art. 52(1).²⁰⁴ Accordingly, Russia’s deliberate attacks against fire stations may, depending on the facts, amount to the war crime of intentionally

directing attacks against civilian objects under Art. 8(2)(b)(ii) of the Rome Statute.²⁰⁵

2.4.3. Attacks on emergency responders as a possible crime of terror against the civilian population

Some attacks examined in this report may implicate the prohibition in Article 51(2) of AP(I) on acts or threats of violence the primary purpose of which is to spread terror among the civilian population. Whether particular incidents support criminal charges on that basis would depend on the applicable legal forum and the evidence available in each case.

Rule 2 of customary IHL²⁰⁶ and Article 51(2) of AP (I) explicitly prohibit acts or threats of violence, the primary purpose of which is to spread terror among the civilian population.²⁰⁷ The application of this provision requires establishing three elements: (1) acts or threats of violence directed against civilians; (2) the perpetrator’s intent to make civilians the object of those acts or threats; and (3) the primary purpose of spreading terror among the civilian population.²⁰⁸

As for “terror,” there is no formal, exhaustive definition in international practice. In situations of armed conflict, virtually any attack may generate fear as an incidental effect of hostilities.²⁰⁹ For example, the brutality of attacks against armed forces may be intended to demoralize the enemy.²¹⁰ Such instances, however, are not equivalent to “terror” within the meaning of IHL.²¹¹ Rather, the concept refers to violence employed not to secure a concrete military advantage, but to create an atmosphere of constant danger and insecurity among the civilian population.²¹² In this regard, the legal approach developed in the cases of *Prosecutor v. Galić* and *Prosecutor v. Milošević* is instructive, as it characterizes terror as acts or threats of violence directed against civilians with the primary purpose of spreading terror among them²¹³ aimed at demoralizing and intimidating persons not taking part in hostilities.²¹⁴ The “presence of a specific purpose” requires establishing the specific intent of the individual carrying out the act.²¹⁵ In this context, the special intent does

not merely concern the execution of the attack itself, but the deliberate aim of causing terror as its primary consequence. It is therefore insufficient to demonstrate that the perpetrator was aware that an unlawful attack would generate fear among the civilian population; rather, it must be shown that instilling such fear was a principal purpose of the conduct.²¹⁶ This intent may be inferred from the totality of the circumstances, including, in particular, the nature, manner, timing, duration, and location of the attack.²¹⁷

The third element—“targeting the civilian population”—requires that the perpetrator knowingly make the civilian population, or individual civilians not taking part in hostilities, the object of violence.²¹⁸ This encompasses not only direct attacks against civilians, but also indiscriminate and disproportionate attacks that affect them.²¹⁹

In this context, this targeting may include both emergency responders protected under IHL and other civilians present at the site of the strike or arriving to provide assistance. The protected status of emergency responders has been examined above, while the general protections afforded to civilians under IHL apply equally to other individuals not participating in hostilities.²²⁰

The factual circumstances indicate that Ukrainian emergency responders face risks while carrying out duties at attack sites, staying in fire stations, evacuating civilians, conducting mine clearance operations, and performing other essential tasks. In such conditions, their professional activities may be accompanied by the constant threat of double-tap strikes, contributing to a persistent sense of danger and uncertainty. This situation may support an inference that the attacks aim to spread terror among individuals not taking part in hostilities by creating a persistent sense of danger and insecurity. At the same time, such conduct risks destabilizing the functioning of the entire emergency response system, as it is likely to affect both the willingness and the operational capacity of emergency responders to carry out their duties. Due to the nature of their work, the presence of emergency responders in fire stations during working hours is inherently predictable, as it directly follows from their professional responsibilities.²²¹ Likewise, their arrival at the scene of an attack is foreseeable, since response protocols

require them to provide assistance in such circumstances.²²² Accordingly, in cases of double-tap strikes, it is reasonable to expect that emergency responders will be present at, or arrive at, the site. A similar logic applies to other civilians, including medical personnel, journalists, humanitarian workers, and ordinary individuals who provide ad hoc assistance at the scene.

In general, any concrete and direct military advantage derived from the use of double-tap strikes in such circumstances appears absent or, at best, extremely limited. During the second strike, it is predominantly civilians who are exposed to harm. Any potential legitimate military targets may have been neutralized during the initial strike, or moved following the initial strike. The delay in double-tap strikes suggests that the aim of these second strikes is not to prevent the relocation or rescue of military personnel and equipment, but to target emergency responders in the second attack.

In this context, a repeated attack does not demonstrate a clear and concrete military necessity; rather, it creates a situation in which individuals cannot reasonably expect to provide assistance to survivors without facing the risk of being attacked themselves. This systematic deprivation of a sense of security and the deliberate creation of conditions in which emergency response becomes exceptionally dangerous may bear the hallmarks of the crime of terror against the civilian population.

Illustrative in this context is the case *Prosecutor v. Karadžić*, in which the court concluded that the campaign of shelling and sniper attacks directed against the civilian population constituted the crime of terror.²²³ The key point here is that both sniper attacks and double-tap strikes, as well as other similar tactics, when carried out in a systematic, indiscriminate, and disproportionate manner, may amount to the crime of terror.²²⁴

Accordingly, tactics involving the systematic use of indiscriminate or disproportionate attacks, may violate the prohibition under international humanitarian law on acts or threats of violence whose primary purpose is to spread terror among the civilian population. Depending on the facts and the applicable legal forum, such conduct may also be relevant to war-crime charges, including charges based on attacks against civilians or ci-

CHAPTER 3

FRAMING EMERGENCY RESPONDERS AS TARGETS: PRO- RUSSIAN TELEGRAM NARRATIVES

This chapter examines how pro-Russian Telegram channels have described Ukrainian emergency responders and attacks against them, and identify the key narratives that emerge from this messaging. Across 169 messages on 26 channels, these sources threatened repeat strikes, portrayed SES personnel as lawful targets, mocked injured emergency responders, and in some cases openly called for more attacks. While these messages do not by themselves establish responsibility for particular strikes, they help show how violence against emergency responders has been framed, justified, normalized, and at times incited in pro-Russian sources. The narratives may further suggest the deliberate targeting of emergency response efforts and help identify potential perpetrators.

On July 5, 2025, the anonymous Telegram channel From Mariupol to the Carpathians (OMDK),²²⁵ which works in close cooperation with Russian units in southern Ukraine, published a post announcing that the SES “will soon be [...] named [...] a priority target if it hasn’t been yet,” and thus, “the locations, parking spaces and service points [of the SES] will be destroyed,” and “personnel [will be considered] a potential threat.”²²⁶ This was the culmination of over 70 other posts made on the channel between June 9, 2024, and May 5, 2025, containing standardized warnings of “guaranteed” double-tap strikes on emergency services in Kherson and the adjacent town of Antonivka if they were to arrive at the site of a strike. In total, between February 24, 2022, and October 31, 2025, we found 169 messages of this kind²²⁷ on 26 pro-Russian Telegram channels.²²⁸ These messages may point to the motives behind attacks on Ukrainian emergency responders and suggest that at least some units carried them out intentionally and with planning.²²⁹

²²⁷ The analysis was carried out manually using keywords (“ДЧС”, “ГСЧС”, “спасатель”, “пожарный”, “пожарник,” etc. (“SES,” “emergency responder,” “firefighter”) in the Truth Hounds’ database of over 100 Telegram channels. At the final stage of the analysis, we also used the TeleZip Telegram bot to identify additional sources.

²²⁸ The sample only includes original posts and excludes reposts. It does, however, include posts that exactly repeat content from other channels if the channel author published them as that channel’s own original post.

²²⁹ The list includes the channels containing significant mentions of Ukrainian emergency responders, emergency workers’ infrastructure and equipment, as well as the SES as a government institution. Technical references (for example, the SES as the source of photos or videos of destruction) were not included in the analysis. Most of the channels we analyzed did not contain significant mentions that met the sampling criteria. This indicates that the focus on Ukrainian emergency responders or the SES is characteristic of a specific segment of pro-Russian Telegram channels—mostly ones connected or associated with specific units of the Russian army.

²³⁰ On September 1, 2025, Oleksii Kostrubyskyi (Russian: Alexei Kostrubitskiy) was appointed the Deputy Minister of Russia for Civil Defense, Emergencies, and Disaster Relief

3.1. From acknowledgment to incitement

The earliest publication referring to Ukrainian emergency responders identified by our team appeared on the anonymous Telegram channel Kuvalda | Vorschlaghammer | Massette | Sledgehammer (formerly 1.infantry | Donetskaya Pekhota) on March 2, 2022. It reproduced an appeal of the then-head of the Ministry of Emergencies of the self-proclaimed Donetsk People’s Republic (DPR), Oleksii Kostrubyskyi,²³⁰ to SES personnel, urging them to continue their professional duties under Russian control:

“I am addressing the employees of the SES of Ukraine. We know that you did not commit crimes against civilians. You are protected by international conventions. Do not give in to panic and provocations, continue to work and fulfill your duty. The war will end soon. You have the opportunity to continue working, retain your positions, titles, seniority, and benefits. Wages will be paid on time and in full.”²³¹

This post demonstrates that Russia-linked officials are aware of the protected status of emergency workers under IHL and understand that SES employees are qualified and valuable professionals.

However, on April 17, 2022, the anonymous Telegram channel 338, likely linked to Russian security forces,²³² shared a post in which, for the first time, the SES was equated to a structural unit of the Defense Forces of Ukraine and hence a legitimate military target. The post stated that the official calculation of military losses on the Ukrainian side should include losses among emergency responders:

“Daily losses among military personnel also include the death and elimination from service of SES personnel (emergency workers are exempt from conscription, but their service is equated with military service), [...] who, in particular, demine what was mined [or] hastily thrown by fighters of the AFU, the National Guard of Ukraine, etc. Losses among emergency responders [...] are small against the general

backdrop, but it is still a loss of personnel. Who needs to be evacuated, treated (in case of non-lethal injuries), while vacancies need to be filled with new personnel. By calling up emergency responders from the reserves, providing accelerated training, or, as Kyiv does, inviting foreign emergency responders.”²³³

In 2022, the Telegram channels that we analyzed published at least 10 publications mentioning the SES; 60% appeared on channel 338, which often framed the work of Ukrainian emergency responders as military activity. For instance, on December 25, 2022, the channel made a post stating that emergency responders are military personnel.²³⁴

“In the last two or three weeks, there has been a significant increase in losses among rescue workers (SES). Both “200” and “300.”²³⁵ Mostly Kherson and Kharkiv Oblasts, Zaporizhzhia Oblast less often. There are practically no reports of losses in Kyiv Oblast. Mainly projectiles and explosives. It appears that losses among emergency responders are either kept secret or not advertised [...]; messages are published either by relatives or acquaintances, or by regional news outlets, or, at most, by regional authorities. And here’s the thing [...]. Emergency responders are military personnel. Kyiv does not need to increase the statistics of losses at all.”²³⁶

In later years, the number of such messages steadily increased, from 15 posts in 2023 to 59 in 2024. This increase largely stemmed from standardized “warnings” on the OMDK channel, which accounted for about 40% of all messages:

“We are warning the special services that will be involved in responding to attacks. You are guaranteed to be a priority target. Guaranteed.”²³⁷

From January 1 to October 31, 2025, the channels posted 85 messages, the highest number recorded during the study period. Nearly 60% came

from the OMDK channel. This tracks the broader increase in suspected attacks against emergency responders over 2022 to 2025.²³⁸

Telegram channels allegedly linked to specific Russian military units posted most messages mentioning Ukrainian emergency responders, particularly SES employees. These channels accounted for 60% of all analyzed publications. Among them are OMDK, Kuvalda | Vorschlaghammer | Massette | Sledgehammer, BPLA ROI, Wagner v Telegram, KOT DOBROKHOD BPLA, FOBOS BPLA, and others. Posts of this type also appeared on the channels of so-called “experts” and “military correspondents” (7% of messages). The affiliation of approximately 22% of channels remains uncertain. The Russian official channels we analyzed either made no comment on attacks against Ukrainian emergency responders or omitted²³⁹ that emergency services were present at the sites of double-tap strikes.²⁴⁰

Approximately 65% of the identified messages threatened emergency responders. Nearly all of them, 98%, appeared on the OMDK and Kherson Osvobozhdenny channels as standardized warnings about double-tap strikes.

Another 18% of posts portrayed emergency responders, fire stations, and emergency operations vehicles as military targets. For instance, on May 27, 2023, the Dva maiora channel published a list of “adversary agencies belonging to the defense and security sector.”²⁴¹ The SES was included on the list.²⁴² The 338 channel also shared a similar post, portraying SES personnel training abroad as equivalent to AFU military training:

“Given the specific nature of [...] the SES, it was easier to send the employees of these services abroad for training [...] formally they are not the AFU, but they are persons in military service. [...] Emergency responders are not just about demining (as one part of their activities), it can also be “the other way around,” which would be in demand in a situation of possible retreat. Therefore, educational courses for [...] emergency responders organized in NA-

²³³ Cargo 200 stands for “irrecoverable losses” (i.e., soldiers killed in action); cargo 300 is a code for the wounded soldiers.

²³⁶ The claim that SES emergency responders are military personnel is false. The SES is not a military structure, but a national civil protection service. Its activities are directed and coordinated by the Cabinet of Ministers of Ukraine through the Minister of Internal Affairs. At the same time, SES emergency responders may participate in responding to attacks on military facilities and, if necessary, coordinate these activities with the military. As stated in Chapter 2, under AP I to the Geneva Conventions, such work does not strip them of protection nor make them a legitimate target.

²³⁸ Chapter 1.

²⁴⁰ As part of the study, we analyzed Telegram channels and/or official websites of the President of Russia, the State Duma, the Ministry of Defense, and the Ministry of Emergencies.

²⁴¹ As of October 31, 2025, the channel had 1.2 million followers.

TO countries have just as much significance as the training of the AFU and teaching them how to work with Western weapons.”²⁴³

8% of the messages analyzed contained ridicule, sarcasm, or irony directed at emergency responders. For instance, on July 16, 2025, the official SES Telegram channel published a post about a double-tap strike in Nikopol. According to the post, emergency responders were evacuating a civilian woman injured by an FPV drone fire when the Russian military struck again by dropping an explosive from another drone. As a result, three SES employees and the woman's husband were injured. The post included a photo of injured emergency responders in the hospital.²⁴⁴

The next day, the anonymous Telegram channel Kuvalda | Vorschlaghammer | Masette | Sledgehammer responded to the incident by publishing the same photos along with a post that mocked and wished death upon the injured SES workers:

“Nikopol massacre—the pig-slaughter falls on khokhol [derogatory term for Ukrainian] emergency responders again. Due to explosions of broken AC units and ceasefire violations by the Ukrainian side, SES workers who tried to stop Russia from clearing the buffer zone were scattered all over Nikopol. The stupid khokhols are now staying down and not jumping anymore. They all must die.”²⁴⁵

Two other messages of this type also mocked the deaths of SES workers. For example, on August 8, 2024, the anonymous channel Wagner v Telegram commented on the double-tap strike on the city of Pokrovsk, Donetsk Oblast, which killed seven people, writing:



Photo of an emergency responder injured in a double-tap strike in Nikopol. Source: Telegram channel of the State Emergency Service of Ukraine (July 16, 2025).²⁵⁷

“The [deputy] head of the State Emergency Service in the Donetsk Oblast also flew to Bander.”²⁴⁶

As a result of the incident, Civil Defense Colonel Andrii Omelchenko, who dedicated over 25 years of his life to emergency service, died from injuries.²⁴⁷

Another post on the Kozachya Lopan Z channel mocked the fact that emergency responders wore bulletproof vests. According to the channel's author, this allegedly indicated the presence of military targets at the Epicenter hypermarket in Kharkiv, which was attacked on May 25, 2024, killing 19 civilians:

“Now there is a video where firefighters walk through the territory of the burned hypermarket. And they are wearing not only uniforms but also bulletproof vests. This begs the question, why are firefighters wearing bulletproof vests? Is there anything to be afraid of? Maybe they are scared of explosives that may have failed to detonate before?”²⁴⁸

Since the beginning of the full-scale invasion, wearing bulletproof vests has become the standard, sometimes mandatory, practice for emergency responders dispatched to the sites of Russian strikes, whether the target was civilian or military. This reflects the growing threat of targeted attacks, especially double-tap strikes.²⁴⁹ Approximately 5% of mentions linked the activities of the SES with Ukraine's engagement of foreigners and NATO countries in hostilities. The 338 channel published most of these posts and has promoted since mid-2022 the claim that the SES serves as a “cover” for “importing mercenaries” since mid-2022.

For instance, on May 2, 2023, the channel made a post about two Canadian voluntary members of the International Legion, Kyle Porter and Cole Zelenko, who died during hostilities near Bakhmut. The post explained that the two men “were first associated with SES units in Kharkiv Oblast,” and whose duties were allegedly far beyond the scope of civil defense tasks:

“Earlier, we mentioned that the units of the SES of Luhansk Oblast were redeployed to Donetsk

and Kharkiv Oblasts and are operating [...] in localities with active hostilities, [in particular] in Bakhmut—firefighting, rescue, demining (by designation). In reality, the range of their activities is much wider. This is what allows foreigners to participate. Myths about medicine are a thing of the past."²⁵⁰

Based on open sources, Kyle Porter worked with the SES in early 2022 as an emergency medic in Kyiv and Kharkiv Oblasts as a Canadian International Rescue Organization (CIRO) volunteer. Among other things, he conducted workshops for local firefighting units and personally participated in several rescue operations where he helped both civilians and wounded soldiers, which is still within the civil defense tasks as outlined by IHL.²⁵¹ At the time, according to the information available, Porter was neither an employee of the SES nor a member of the military. We were unable to find any information that would confirm Cole Zelenko's cooperation with the SES. According to an interview with Espresso, when he arrived in Ukraine in 2022, he immediately joined an unnamed military unit of Ukraine's armed forces as a volunteer fighter.²⁵²

On June 22, 2023, 338 published another post about the American NGO the R.T. Weatherman Foundation. The post also referred to one of its employees, David Bramlett, a retired U.S. Army soldier and veteran of the Ukrainian International Legion. The foundation helps repatriate the bod-

ies of American soldiers who died in Ukraine. The post repeated the statement about using SES as a "cover" for attracting "foreign mercenaries":

*"It has been confirmed that Western advisors, as before, are still using the scheme of importing mercenaries and legalizing them by attaching them to SES units. This can explain the appearance of new mercenaries in the Kherson direction—after all, specialists [from the Foundation] and Bramlett came there together with emergency responders."*²⁵³

According to the Weatherman Foundation's website, it cooperates with 20 Ukrainian governmental organizations and institutions.²⁵⁴ It provides humanitarian aid, tactical medicine training, DNA identification of the fallen, and providing psychological support programs for the military, etc.²⁵⁵ The only confirmed interaction of the Foundation with the SES in Kherson Oblast is a picture of David Bramlett published in an article by The Daily Beast on June 30, 2023. In the picture, he is standing next to a truck with boxes marked "SES of Ukraine (Kherson Oblast)" and shaking hands with a man in a SES uniform.

There is also confirmed information that the organization participated in relief efforts after the destruction of the Kakhovka HPP in the summer of 2023, which also likely entailed coordination with the SES.²⁵⁶ We have not found any information that would indicate the organization's involvement in the recruitment of "foreign mercenaries."



Photo of Civil Defense Colonel Andrii Omelchenko, who died as a result of a double-tap strike on Pokrovsk on September 8, 2024. Source: Memorial book of Ministry of Internal Affairs.²⁵⁸

3.2. Correlation with patterns of attack

The rhetoric fits in the larger Russian narrative that Ukraine deliberately recruits foreign mercenaries to fight in the war. As of November 2025, the EU project EUvsDisinfo had identified and refuted over 170 messages with similar content.²⁵⁹

According to the project's analysis, the purpose of this narrative is to justify the full-scale invasion by creating an impression that "NATO fighters," with allegedly aggressive attitudes towards Russia, are broadly present on the territory of Ukraine.²⁶⁰

Since the start of the full-scale invasion, foreign nationals have joined the Ukrainian army through an open and lawful process, with no need for any government "cover." Information about the recruitment procedure is publicly available on the official website of Ukraine's MoD.²⁶¹

Some Telegram channels also used dehumanizing language to portray emergency responders as legitimate targets. 4% of the Telegram messages we analyzed used dehumanizing rhetoric regarding emergency responders.²⁶² More than half of them appeared on the OMDK channel following the July 5, 2025 post, about possibly adding SES personnel and positions to the list of "priority targets."²⁶³ On July 10, 2025, the slur "petukhi"²⁶⁴ is used to describe emergency responders for the first time, though it had previously been used only to refer to the military. ("Strong fire is reported in the area of artillery work. We are waiting for "petukhi" from the SES.")²⁶⁵ Every message of this type published on the channel combined this dehumanizing rhetoric with threats. For example, a post from August 14, 2025, stated:

"Kherson. Red zone. [...] Something tells me that losses among the SES "petukhi" will in-

*crease exponentially. Any movement of vehicles will be considered a legitimate target. All critical infrastructure facilities are a legitimate target."*²⁶⁶

A post from October 9, 2025, was the first open call for violence against SES emergency responders in the OMDK channel:

*"We should increase the quantity of remote mining with further attacks on groups engaged in handling the consequences, as well as the SES."*²⁶⁷

The KOT DOBROKHOD | BPLA channel also shared a similar post calling for continued double-tap strikes exactly four months earlier, on June 9, 2025:

*"Enemy sources complain that there are increased losses among the AFU and the so-called emergency responders (what kind of emergency responders would try to pull equipment and weapons out of the rubble?) due to double-tap strikes. A wonderful tactic; the survivors should be finished off; that's the only way we can be confident they won't show up in another Kursk Oblast."*²⁶⁸

The rhetorical shift in messages about emergency responders published on a number of Telegram channels in 2025 correlates with the increased number of suspected targeted attacks against emergency responders over the same period. After the July 5 post about possibly making the SES "priority targets," the OMDK channel, which focuses on Kherson and Antonivka, shared it twice more: on September 28 and October 23.²⁶⁹

During this four-month period, Truth Hounds identified 12 cases of suspected attacks on emergency responders in Kherson and Antonivka based

²⁶² As part of this study, dehumanizing rhetoric means statements that aim to deprive a certain individual or group of individuals of "human features," making empathy towards them unnecessary, and various forms of violence morally simple and justified.

²⁶⁴ A highly derogatory prison-slang term for a man who is considered the lowest in the prison hierarchy (typically one who has been sexually abused or forced into a sexually submissive status). It is also used as a homophobic slur.

on online monitoring data. Three attacks led to injuries among six SES emergency responders,²⁷⁰ and three more caused damage to fire and rescue equipment.²⁷¹ This is 6 times the number of identical cases recorded in the city over the previous six months using the same methodology. Most of these were likely carried out with drones, many of which allow operators to monitor the target in real time via a live video feed.²⁷²

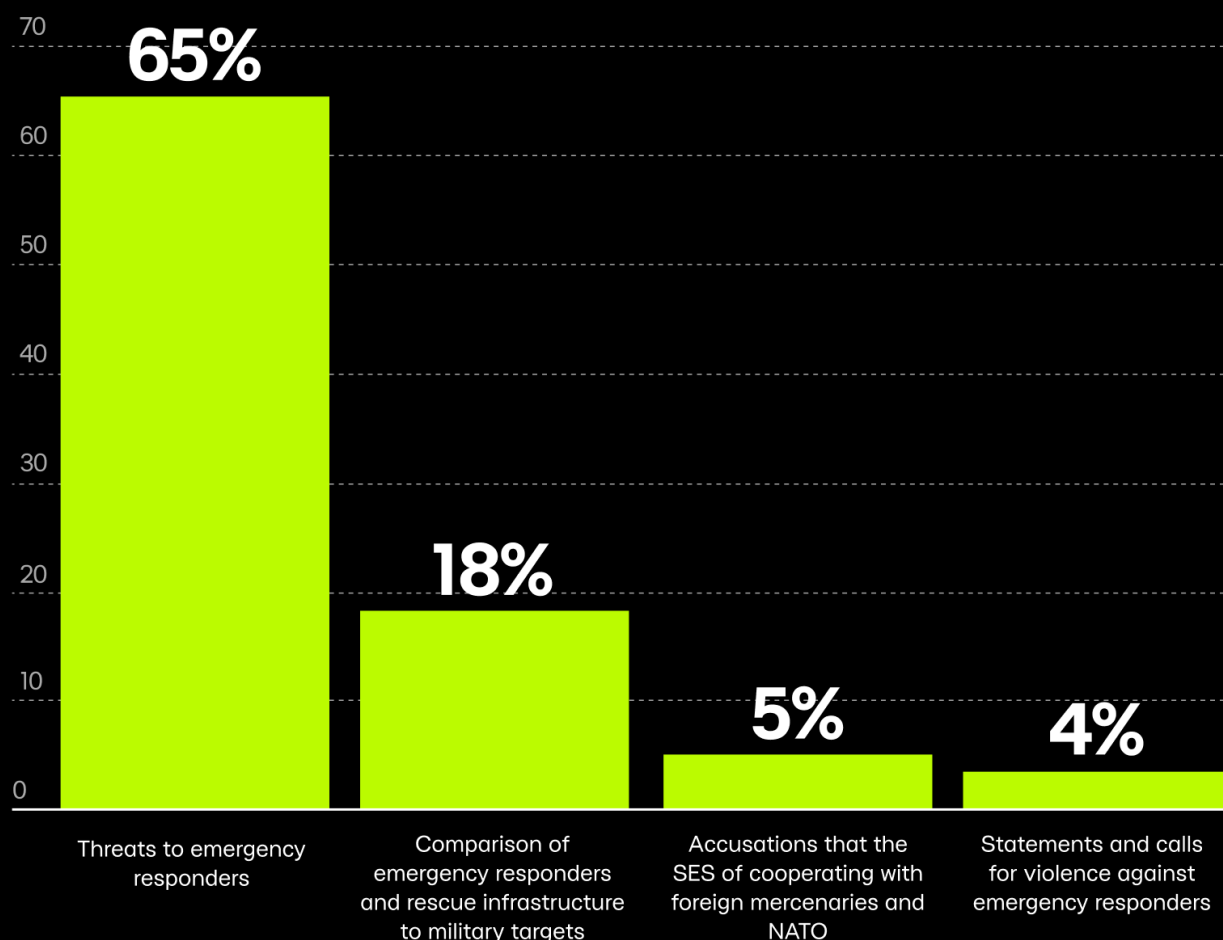
This data does not, by itself, prove a causal link between these Telegram posts and direct strikes on emergency responders. They do, however, demonstrate an important correlation, that, when considered together with other evidence, may help demonstrate that Russian forces in the Kherson area intentionally targeted SES personnel.

THE ANALYZED MESSAGES FROM PRO-RUSSIAN TELEGRAM CHANNELS CONTAINED

The percentages shown reflect the share of all

169 messages

* These figures were made using binary coding of each message according to the variables "Threats," "Equating to military personnel," "Accusations of cooperating with NATO or foreign mercenaries," "Dehumanization," and "Calls for violence." Since a single message could contain more than one of these features, the figures do not add up to 100%.



3.3. Conclusion

Ukrainian emergency responders and the SES have repeatedly been the focus of pro-Russian Telegram channels. In 2022, most of the messages we analyzed were neutral towards emergency responders. Since mid-2024, posts have threatened “guaranteed” double-tap strikes if rescue workers arrive at the strike site.

The anonymous Telegram channel OMDK posted more of these messages than any other source and appears to closely work with Russian units in the south of Ukraine. It accounted for over 50% of all references to emergency responders. Posts peaked in 2025, when the channel described SES personnel and infrastructure in Kherson and nearby Antonivka as possible “priority targets.”

These posts are inflammatory and misrepresent the status of emergency responders under IHL. Their rhetoric helps legitimize attacks on emergency responders by casting them as both strategically justified and ethically acceptable.

By 2025, the number of posts about emergency responders on the Telegram channels we analyzed increased more than eightfold compared with 2022. According to online monitoring, this correlates with increased attacks on emergency responders, although it does not necessarily indicate a direct cause-and-effect relationship. Further analysis of such posts, particularly combined with specific attacks, may help establish causal links, intentionality and identify possible perpetrators.

Photo:
Pavlo Petrov

CHAPTER 4

IMPACT OF ATTACKS ON EMERGENCY RESPONDERS IN UKRAINE



SERHII NYZHNYK

Captain of the Civil Defense Service, Chief Guard of the 14th State Fire-Rescue Unit, 3rd State Fire-Rescue Squad, MD of SES of Ukraine in Dnipropetrovsk Oblast²⁷³

For me, being an emergency responder in these conditions is to have hope in people in the toughest situations and [...] a reminder that the most valuable treasure on Earth is human life.

Since Russia's invasion began in 2014, and especially after its escalation in 2022, Ukrainian emergency responders have faced a major expansion in their duties and workload. Humanitarian assistance, evacuating the civilian population from frontline territories, humanitarian demining, servicing "Invisibility Points" during power outages and other tasks were added to the everyday challenges and tasks, connected with disaster response.²⁷⁴ These fundamental changes irrevocably transformed not only the experience of individual emergency responders, their daily tasks and personal well-being, but the nature of their emergency work.

In this chapter we outline possible long-term consequences of armed attacks and the war in general on civil defense in Ukraine. We also document some of the practices that allow emergency responders to stay resilient facing difficult circumstances. Given the difficulties in accessing some respondents, as detailed in the Methodology, this review is not exhaustive. Rather, it systematizes information from a limited number of interviews and open sources to lay the groundwork for further research.²⁷⁵

²⁷⁵ This chapter is largely based on 13 interviews with emergency responders of the SES, as well as volunteer and local fire defense units.



SES "Invisibility Point" in Kyiv during mass outages of electricity, heating and water supply, January 22, 2026. Source: Edward Matthews.²⁷⁶

4.1. Impact on emergency operations

In some localities during the full-scale war, a number of war-related calls for assistance can equal or exceed the number of standard emergency calls.

The deputy head of SES Directorate in Kharkiv Oblast, Anatoliy Torianyk, said that as of September 2022 shelling caused up to 100% of fires in communities near the front line.²⁷⁷ Truth Hounds received similar information in an interview in 2025 with an SES emergency responder from the village of Velykyi Burluk, Kharkiv Oblast, which at that time was located about 20 kilometers from the frontline:

“

“Effectively all calls now are because of shelling,” he noted.²⁷⁸

With an increase in distance from the line of contact, the share of war-related calls decreases. Emergency responders from local and volunteer firefighting units in the villages of Pischyn and Donets in Kharkiv Oblast, which at the time of the interview were 50 and 80 kilometers from the front respectively, noted that the share of war-related calls for them was 30% and 10%.²⁷⁹

Regular calls linked to the indirect effects of attacks also increased over time and in geographical scope. In places where strikes damaged critical infrastructure, emergency power and heating outages led to fires caused by improper use of backup power sources.²⁸⁰ In the summer more fires broke out in fields and forests because heat and dry conditions let shelling-related fires spread quickly over a large area.²⁸¹

“

“In 2024 there were three to four calls per day. It started sometime in August and lasted a long time. Boilers and stoves would ignite; because of the war fires often started because people didn't have light or water, and were forced to

get warm and cook somehow,” a local firefighter in Kharkiv Oblast told Truth Hounds.²⁹⁸

As the workload grew, response conditions became far more difficult. In response to threats described in earlier chapters, emergency responders changed safety procedures. In frontline territories, bulletproof jackets, helmets and personal first aid kits became mandatory.²⁸² Before the full-scale invasion, a first responder typically carried about ten kilograms of equipment. After 2022, that load could reach 30 kilograms on war-related calls.²⁸³ The added weight reduced mobility and increased physical strain, especially during extended work often interrupted by renewed attack threats.²⁸⁴

To protect against double-tap strikes, emergency responders, in accordance with SES recommendations, designate someone at the site to monitor the sky and alert coworkers about possible danger.²⁸⁵ If needed, they give a special signal that means the work must immediately cease and emergency responders and others in the area—local residents, journalists, emergency services representatives—must go to a shelter:

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“If time is tight, we [...] drop everything and leave. Even when we're on a ladder, we have 1-2 minutes after the order to leave to either remove the person and climb down, or climb down ourselves and hide quickly,” stated **Yaroslav Zaitsev**, Head of the 41st State Fire-Rescue Unit in Kostyantynivka, in an interview with Free Radio.²⁹⁹

These forced pauses can be costly to health and safety as a fire spreads out of control or clearing debris to rescue trapped civilians is delayed.²⁸⁶

SES emergency responders can receive information about the threat of attacks from the military,²⁸⁷ or with the help of so-called drone detectors (“Tsukorok”, “Chuika” and others),²⁸⁸ which

²⁸⁷ Coordination between emergency responders and soldiers stems from the military's exclusive access to certain types of intelligence data, which is critically important for protection from armed attacks in the line of duty.

²⁸⁸ Drone detectors are a type of electronic signals intelligence (ELINT) that help detect airborne threats early by picking up radio signals and frequencies. Their use has spread with the rise in UAVs. Because they are relatively cheap and effective, civilians also use them, including volunteers and the Ukrainian Red Cross Society.

analyze radio frequencies and warn about incoming drones within a couple kilometers.²⁸⁹ Emergency responders who do not have access to direct communication with the military (such as volunteer firefighters or NGO members) often learn about risks from the SES when they are already on site.²⁹⁰ In this context, close and coordinated cooperation between the SES and the military on one side, and between the SES, local and volunteer firefighters, and general volunteers, is one of the most effective mechanisms for protecting emergency responders and civilians from double-tap strikes.

Emergency responders in frontline areas can also use active protection measures such as electronic warfare (EW).²⁹¹ However, according to one Ukrainian Red Cross employee in Mykolaiv Oblast, some emergency responders and volunteers stopped using EW in 2025. They feared the systems could aid Russian forces to locate them, and they noted that more Russian drones now use fiber-optic guidance, which EW cannot disrupt.²⁹²

While drone detectors and EW help protect against drone attacks, armor on emergency vehicles provides broader protection against direct hits and the effects of shrapnel. From the beginning of the full-scale invasion, civil defense services have used armored vehicles for emergency operations and for evacuating the civilian population from areas near the contact line.²⁹³ This has saved the lives of their passengers during shelling more than once. For example, on August 24, 2024, an FPV drone attacked the SES evacuation group “Phoenix,” which worked in the city of Ukrainsk, Pokrovsk raion, Donetsk Oblast. During the attack, two emergency responders, a policeman, and four evacuated individuals, including an 8-year old child, were in a white car marked with SES signs. Due to the armored protection, nobody was hurt.²⁹⁴ Some civilians refused to evacuate because unarmored vehicles left them fearing targeted strikes *en route*.²⁹⁵

Since 2025, the SES has begun regularly posting photos of its emergency operations vehicles equipped with slat armor as countermeasures against drone strikes.²⁹⁶ This suggests that attacks on rescue equipment have forced the service to adopt new protective measures to preserve scarce and critical assets. As vehicle damage increased,

the SES opened separate repair units in various locations.²⁹⁷



An SES vehicle in Nikopol with slat armor for protection from drones, December 2025. Source: Edward Matthews.³⁰⁰

Providing emergency responders with personal protective equipment (PPE) and repairing damaged equipment requires substantial time, money and effort, all of which are significantly limited in a full-scale war. However, while PPE and damaged equipment in most cases can be repurchased or repaired in a relatively safe environment, repairing damaged fire stations near the front is often far harder or impossible. The volatile security situation and risk of repeat strikes often prevent full restoration. Accordingly, first responders mostly carry out only basic repairs (replacing windows, patching up roofs, and similar) themselves, using what is available.³⁰¹ The unsatisfactory state of the premises in which personnel spend a significant part of their shift can also complicate work conditions in the most dangerous areas.

The need to adapt to the challenges of war drove administrative changes in emergency response.

²⁹⁸ Electronic warfare (REB) is a set of technical means and tactical measures aimed at disrupting or jamming electromagnetic channels to prevent the enemy from having effective communication, navigation or control over UAVs, or to protect one's own systems. The key components of REB are radioelectronic suppression, radioelectronic intelligence, and protection from enemy drones.

²⁹⁹ Slat armor allows for increasing the distance between the impact site and the body of the vehicle, which weakens the cumulative impact of the strike and reduces the risk of it breaking through. This in turn reduces the damage.

One of these was the expanded development of local and volunteer firefighting units, which, as in the case of SES units, respond to regular as well as war-related calls.³⁰² As of October 31, 2025 there are 1,034 local and 1,177 volunteer firefighting units in Ukraine.³⁰³ According to **Oliha Malyarchuk**, the deputy head of the Kherson Oblast Administration, in 2024 local and volunteer firefighters in Kherson Oblast extinguished 610 fires, 25% of the total number in the Oblast.³⁰⁴ The development of local and volunteer firefighting units increases the resilience and self-reliance of communities, particularly those located near the front, and strengthens state efforts to address the consequences of war.

In addition, operating in the context of armed conflict has driven the rapid development and deployment of innovations aimed at reducing risks and facilitating the work of emergency responders.³⁰⁵ In particular, UAVs and robotic firefighting systems have become indispensable. The former are used to assess the scale of an emergency, conduct floor-by-floor inspections of damaged residential buildings, and perform similar tasks. The latter are useful, for example, in responding to attacks on the oil and gas sector, where, alongside the threat of repeat strikes, there are risks associated with tank depressurization and igniting flammable substances. Robotic systems also help emergency responders avoid unnecessary risk when handling explosive devices that may detonate.³⁰⁶ These innovations have been a forced response to the new challenges of war, which have made the direct involvement of personnel in search-and-rescue operations significantly more dangerous than in peacetime.



Tactical firefighting robot Magirus Wolf R1 helps following a Russian attack in Odesa Oblast, April 2024. Source: SES.³⁰⁷

4.2. Impact on physical well-being of emergency responders

A comprehensive assessment of the effect of armed attacks and war in general on the physical health of emergency responders is particularly difficult due to data constraints. According to SES data, from February 24, 2022 to October 31, 2025, 550 emergency responders were injured while working, including more than 115 injured during demining operations.³⁰⁸ At the same time, according to Truth Hounds' open-source monitoring, at least 258 emergency responders are known to have been injured as a result of armed attacks, more than half in double-tap strikes. Our team did not separately collect data on injuries sustained during demining.

The impact of armed attacks and the war on physical health is not limited to direct consequences like injuries or trauma. High levels of stress, excessive workload, sleep deprivation, and working in extremely cold or hot temperatures, among other factors, can also lead to chronic health issues and negatively impact emergency responders' health in general. Local and volunteer firefighting units may be particularly vulnerable to this, as they are often composed of older personnel.³⁰⁹ According to several interviewees, this age pattern reflects the lack, or insufficiency, of military service exemptions for younger, military-age employees and volunteers for the local and volunteer firefighting brigades.³¹⁰



"Since 2022, two employees have died from heart conditions, and two had strokes because of their age [...] There was a case when a 62-year old employee finished their shift, went home and died. The stress while putting out fires is very high. People work in the state [fire and rescue units] for 20-25 years, inhaling smoke, [...] retire and then join local firefighting units already exhausted. We take whoever shows up, because there's no other choice," said the head of the Emergency Situations, Civil Defense and Labor Protection unit in a

village council in Kharkiv Oblast in an interview with Truth Hounds.³¹¹

In another interview with Truth Hounds, a 47-year-old employee of a local firefighting unit from a different frontline community in Kharkiv Oblast said that he was on medical leave for more than four months after having a stroke, which he believed could be linked to work-related stress, though this could not be confirmed.³¹²

As a result of serious injuries, emergency responders can temporarily or permanently lose the ability to carry out their usual work, which often involves heavy physical exertion. This sudden departure of personnel with experience, education and training can complicate the hiring of new, competent staff for these vacant positions, and also raise issues of the role that injured emergency responders may play in the future civil defense system.

4.3. Impact on mental health of emergency responders

Since February 2022, one key task for emergency responders has been dealing with the aftermath of armed attacks on civilian buildings. This includes searching under rubble for survivors, and sometimes recovering bodies. Depending on the scale of the damage and the technical conditions, these operations can take from several hours to several days. In addition to the significant stress and fatigue caused by the work itself, emergency responders often report fearing that they will not reach victims in time.³¹³ The high risk of double-tap strikes constitutes an additional stress factor, requiring constant vigilance and potentially causing anxiety and feelings of guilt when rescue operations are suspended for safety reasons.



“Although earlier there were some cases of scary things, this was in small doses. Now the scariest thing is having to dig out people and children from the rubble. This is stressful. Plus there are double-tap strikes. Anxiety has increased a lot in Kharkiv Oblast because of this... And people are even in an anxious state, like a panic, and they say they won’t go out on the call. [...] It’s really scary for them and it really changed everything. Every day feels like it might be your last. [...] Emergency responders face this every day,” said **Viktoriia Kryvolapchuk**, co-founder of the Brave Minds project for psychological assistance to SES emergency responders.³¹⁴

The constant sense of danger grows worse when emergency responders lose colleagues in the line of duty. This is particularly the case for double-tap strikes, where emergency responders often directly witness the fatal injury or death of their coworkers. This traumatic experience can cause survivor’s guilt and have serious long-term psychological consequences.

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“Emergency responders are one family. [...] The hardest thing is losing your colleague, friend, brother-in-arms. It’s really hard for the guys to go through. [...] Men—big, adult, strong—they cry like children. [...] It doesn’t go away: you can’t [...] make peace with it, because we were working together, [...] going out for a shift, and now when you come back... These cabinets still have the names, which of course nobody has taken down... it’s really tough to accept,” noted **Maryna Averina**, head of the Media Relations and Public Relations Unit of the SES Main Directorate in Odesa Oblast, in an interview with the First Local Channel.³¹⁵ Her colleagues Denys Kolesnikov³¹⁶ and Vitaliy Alimov,³¹⁷ 6th State Fire-Rescue Squad of the MD of the SES in Odesa Oblast, died following a double-tap strike in Odesa on March 15, 2024.³¹⁸

For many emergency responders, these experiences unfold in places connected to their own lives. They work in familiar streets and buildings, knowing the next strike could hit their own home or family. Even when unspoken, this adds to their sense of professional responsibility and deepens the psychological strain.

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“You see how many of our homes are ruined here. My wife’s family lived in Kamiansk.³¹⁹ I evacuated them—90% of the houses there are gone. Everything was hit. And I saw how people had built their lives there. My wife’s grandfather... He survived one war, and then another. It’s very tough. And his house is already gone. I went out to that house myself three times on call. I extinguished it myself,” **Roman Ponomarev**, Chief of the Guard of the fire brigade for Stepnohirska, Zaporizhzhia Oblast, said in an interview with Suspilne Zaporizhzhia.³²⁰ At the time of the interview, Stepnohirska was approximately 4 kilometers from Russian military positions.³²¹

³¹⁹ A village in Zaporizhzhia Oblast, occupied by Russia since July 30, 2025.

Depending on movements on the frontline, emergency responders often have to leave their homes and relocate to the middle of the country, when the level of danger comes unjustifiably high or because the town falls under occupation. For example, for these reasons emergency responder **Mykhailo Tymchak**, from Bakhmut raion, Donetsk Oblast, changed his place of service at least twice. According to available information, in June 2025, he was working in the city of Lyman, Donetsk Oblast, and near where fighting had intensified in January 2026.³²² In addition, many emergency responders in frontline areas evacuate their family and live apart for long periods, losing a key source of support and strength. These personal circumstances can make everyday work harder and negatively impact first responders’ mental health.³²³



Funeral of Denys Kolesnikov, an emergency responder who died following a double-tap strike in Odesa on March 15, 2024. Source: MD of the SES in Odesa Oblast.³²⁴

³²³ This issue is often mentioned in interviews with emergency responders published on the SES Main Directorate in Donetsk Oblast’s Instagram and Facebook. Almost 100 stories have been collected on these sites, each of them has a description of the first responder’s path to service with the SES, their most memorable incident, and personal circumstances after February 24, 2022, as well as their personal dreams. In this last section, first responders often voice their desire to be reunited with their family after the end of the war.

4.4. Conclusion

The full-scale invasion has transformed civil protection in Ukraine. On one hand, the need to respond to the aftermath of armed attacks, combined with the widespread targeting of emergency responders, fire stations, and emergency operations vehicles, has placed unprecedented strain on personnel, affecting both their ability to carry out life-saving work and their physical and mental well-being. On the other hand, the dramatic rise in humanitarian needs, especially in frontline areas, along with the rapid evolution of the means and methods of warfare, has forced emergency responders to adapt quickly, find technological solutions, enhance coordination with volunteers and the military, and strengthen local capacity.

Despite the difficult circumstances and targeted attacks, emergency responders remain an important pillar of Ukrainian society. In addition to addressing the consequences of armed attacks, they have taken on a wide range of other tasks related to saving lives and protecting the civilian population during an armed conflict: from evacuations from frontline areas to the setting up of “Invincibility Points.” These efforts have helped the SES earn one of the highest levels of trust among state institutions, second only to the Armed Forces of Ukraine.³²⁵ In turn, societal support and gratitude have been a key source of motivation and inspiration for emergency responders, working under extreme conditions for four straight years.³²⁶

With the war continuing and attacks on emergency services on the rise, emergency responders in the SES, as well as in local and volunteer firefighting units, continue to face a significant need for financial, technological, and medical-psychological support. In this context, solidarity and assistance from partners remain essential for bolstering the resilience of Ukraine’s civil defense system.

CONCLUSION

Since the first day of the full-scale Russian invasion, Ukrainian emergency responders have faced unprecedented risks and pressure from both a sharp increase in workload and targeted Russian attacks.

As part of this report, we identified two main types of attacks: double-tap strikes and attacks on fire stations. The number of both has increased year on year since February 2022, reaching a high point in 2025. We also documented numerous cases of Ukrainian emergency responders targeted during evacuations and mine clearance operations, as well as deliberate “hunting” of emergency vehicles. These patterns point to a sharp rise in the dangers faced by emergency responders in Ukraine and highlight the urgent need for greater international solidarity and support.

Most of these attacks were recorded in frontline areas. This geographic concentration may partly be explained by the higher intensity of hostilities in these areas, but it also suggests a broader military strategy aimed at undermining emergency response efforts in communities most affected by the war. This is buttressed by 169 posts on pro-Russian Telegram channels identified by the Truth Hounds team. Some of these posts contain direct threats against Ukrainian emergency responders, portray them as legitimate military

targets, employ dehumanizing rhetoric, and some openly incite violence.

Targeted attacks on emergency responders can have long-term consequences on the well-being and resilience of local communities. In particular, the persistent threat of double-tap strikes creates serious obstacles to rapid emergency response, placing significant strain on responders and increasing the risk that civilians may not receive vital assistance at critical moments. Attacks on fire stations, which can serve as emergency response hubs and civil shelters, may result in the forced relocation of personnel, thereby increasing response times in affected areas. Moreover, most attacks, regardless of type, pose a direct threat to emergency responders who frequently sustain injuries and cause damage to essential emergency vehicles and equipment.

Considering the critical role of Ukrainian emergency responders in protecting civilians during the full-scale war, national and international actors should do more to strengthen their operational capacity and provide comprehensive medical and psychological support. They should also prioritize identifying those responsible for deliberate attacks on emergency responders and pursue accountability through existing criminal justice mechanisms.



Photo:
Pavlo Petrov

Appendix 1

A history of double-tap strikes in international armed conflicts

Double-tap strikes targeting emergency services have been used in many contemporary armed conflicts. Some of the earliest incidents date to the war in Bosnia and Herzegovina.³²⁷ According to trial testimony by Norwegian photojournalist Morten Hvaal, who covered events in the country from September 1992 to August 1994, snipers from the army of Republika Srpska shot pedestrians in the streets, deliberately inflicting non-lethal injuries. When people gathered to assist the wounded, the soldiers shot at them, killing some. According to Hvaal, these second attacks had no military logic and he thought such attacks were a “morbid kind of fun” for the perpetrators.³²⁸

Some suicide bombings have a comparable operational logic, involving a second, closely timed explosion, sometimes by a second bomber, aimed at responders or civilians who gather after the initial blast.³²⁹

Perpetrators may justify these attacks as a way to maximize harm. If the initial explosion targets enemy forces, for example, military personnel or political leaders, the follow-up strike would intend to inflict maximum harm on those affected by the first blast and on those perceived as their supporters, such as emergency responders and civilian aid. From this perspective, the tactic may also aim to erode public trust in the authority controlling the territory by highlighting its weakness and inability to provide adequate protection.

³²⁷ Within the scope of this study, we focus on double-tap attacks as a tactic specifically aimed at harming emergency responders who arrive at the scene after an initial strike. However, the origins of double-tap attacks lie in firearms, where the term historically referred to a shooting method involving two quick successive shots at the same target to maximize the likelihood of neutralizing it. The potentially justified use of double-tap attacks as a military strategy, however, falls beyond the scope of this report.

The first documented double-tap attack involving UAVs occurred on May 16, 2009, in North Waziristan, Pakistan. On that day, U.S. forces launched two drone-fired missiles, striking members of a local branch of the Taliban.³³⁰ Shortly after debris removal began, a follow-up UAV strike reportedly hit the site, reportedly doubling the death toll to approximately 29 people, including six civilians.³³¹

Human rights organizations and academics in the United States have sharply criticized the use of the tactic, noting that it increases casualties among first responders and deters bystanders and emergency services from helping victims due to fear of being targeted themselves. As a result, it leads to higher, preventable human and material losses among civilians.³³² Moreover, the tactic raises questions about compliance with the principle of proportionality. Data from the Bureau of Investigative Journalism indicate that in Pakistan double-tap attacks resulted in at least 50 emergency responder fatalities between 2009 and 2012.³³³ This may point to the possible commission of war crimes and warrants further analysis.³³⁴

The history of Russia’s use of the double-tap attacks is closely tied to its involvement in the Syrian civil war from September 2015 to December 2024. As of July 2022, the nongovernmental organization Syria Justice and Accountability Centre had confirmed 58 double-tap incidents, 22 of which were likely carried out by the Russian military either jointly with the Syrian armed forces or independently.³³⁵ According to the Syrian Civil Defense organization White Helmets,³³⁶ a significant portion of these strikes initially targeted civilian objects and were followed by attacks on volunteer emergency responders.³³⁷ After Russia

entered the armed conflict in 2015, both the frequency and the destructive impact of double-tap strikes increased substantially.³³⁸ Human rights defenders note that in Syria, this tactic was intended to “inflict maximum harm on civilians, undermine the capacity of humanitarian organizations to provide life-saving assistance, and intimidate the population to break its will.”³³⁹

From this brief overview of the use of double-tap attacks across different periods and geographic contexts, two possible, though not mutually exclusive, objectives emerge:

FIRST, double-tap strikes may be intended to ensure and amplify the effects of initial strikes on lawful military objectives. From this perspective, this tactic may be considered strategically justified under certain circumstances, which should be separately assessed on a case-by-case basis. However, this does not necessarily render them lawful under IHL, which requires strict compliance with the principles of distinction, proportionality, and precautions in attack.³⁴⁰

SECOND, double-tap strikes may be aimed at terrorizing the civilian population to suppress resistance or undermining support for the adversary’s armed forces or authorities, as seen, for example, in Syria.³⁴¹ In such cases, however, the attacks must not be isolated incidents but occur with a certain degree of regularity, gradually creating an atmosphere of fear and hopelessness driven by the risk of not receiving assistance at the moment it is critically needed.³⁴²

Sources & footnotes

- 1 Truth Hounds interview with Viktor Likanov (September 10, 2025).
- 2 Truth Hounds interview with Viktoriia Kryvolapchuk (January 26, 2026).
- 3 Truth Hounds (2024). Cruelty Cascade: Examining the Pattern of Russian Double-Tap Strikes in Ukraine. PP. 61-62. URL: <https://truth-hounds.org/en/cases/cruelty-cascade/> (accessed: 02.04.2026).
- 4 Pursuant to Article 8 of the Criminal Code of Ukraine, Ukrainian law enforcement authorities may initiate criminal proceedings under the principle of universal jurisdiction. This applies in cases provided for by international treaties or where a person has committed serious or particularly serious crimes against the rights and freedoms of citizens of Ukraine or the interests of Ukraine.
- 5 Additional Protocol I to the Geneva Conventions (1977).
- 6 Our definition of emergency responders excludes police, healthcare personnel, and humanitarian aid workers. We focus exclusively on those performing civil defense functions, who are sometimes colloquially referred to as “firefighters,” although in reality their duties extend well beyond firefighting.
- 7 Within this study we refer to two definitions of “attacks on emergency responders:” the theoretical, as represented in this text, and operational, which was used during monitoring and coding of specific incidents. For more information regarding these definitions and their reasoning, refer to the Codebook in Appendix 3 to this report.
- 8 The SES is a civil agency whose activities are determined and overseen by the Cabinet of Ministers via the Ministry of Internal Affairs (MID) of Ukraine.
- 9 Local firefighting units are firefighting units in communities where there are no SES units. They are created by local self-government bodies in coordination with the SES. Their personnel are salaried and required to possess the appropriate educational and professional qualifications. See: Code of Civil Protection of Ukraine, Article 62, “Local Fire Service,” URL: <https://zakon.rada.gov.ua/laws/show/5403-17#n917> (accessed: 02.04.2026).
- 10 Volunteer firefighting units are firefighting units in communities without SES units. They are created by local self-government bodies, civil society organizations, or businesses in coordination with the SES. Their personnel are not required to have a specific educational or professional qualification and do not receive a salary, although they may be granted remuneration. See: Code of Civil Protection of Ukraine, Article 63, “Voluntary Fire Service,” URL: <https://zakon.rada.gov.ua/laws/show/5403-17#n917> (accessed: 02.04.2026).
- 11 Truth Hounds interview with RE-002; Truth Hounds interview with RE-003; Truth Hounds interview with RE-004; Truth Hounds interview with RE-005; Truth Hounds interview with RE-006.
- 12 The key terms included “ДЧС” (“SES”), “рятувальник,” “надзвичайник,” “вогнеборець,” (“emergency responder”), “ДПРЧ” (“state fire and rescue unit”), “повторна атака,” “повторний обстріл,” “повторний удар” (“double-tap strike”). This list is not exhaustive and could change depending on the specific source.
- 13 Due to data availability, our monitoring focused primarily on SES personnel.
- 14 For security reasons, we do not publish data about the precise locations of incidents. At the same time, we will consider individual requests for such information on a need-to-know basis and to provide it for purposes such as justice, academic research.
- 15 Based on the data of the Ministry for the Development of Communities and Territories of Ukraine. Ministerstvo rozvytku hromad ta terytorii Ukrainy (2025). Perelik terytorii, na yakykh vedut'sia (velyisia) boiovi dii abo tymchasovo okupovanykh Rosiiskoiu Federatsiui. Verkhovna Rada of Ukraine, URL: <https://zakon.rada.gov.ua/laws/show/z0380-25#Text> (accessed: 02.04.2026).
- 16 More details about such characteristics can be found in Chapter 2.1.
- 17 A more detailed description of every variable used to code this data and possible values for these variables are provided in the Codebook. See: Appendix 2.
- 18 Except Khmelnytskyi Oblast, where the interview was conducted in 2023. In this context, our understanding of the tactic of double-tap strikes largely relies on our interviews with various categories of respondents (emergency workers, civilians, experts on Russian missile weaponry and chain of command, etc.), conducted as part of the 2024 study. See: Truth Hounds (2024). Cruelty Cascade: Examining the Pattern of Russian Double-Tap Strikes in Ukraine. PP. 61-62. URL: <https://truth-hounds.org/en/cases/cruelty-cascade/> (accessed: 02.04.2026).
- 19 Truth Hounds (2023). Code of Ethics for Documenters. URL: <https://truth-hounds.org/en/document/code/> (accessed: 02.04.2026).
- 20 According to the response from the SES leadership to the Official Request dated September 10, 2025 (received November 4, 2025), the inability to comprehensively engage SES personnel in the interview process was due to the “engagement of personnel in urgent assignments on handling the aftermath of shelling [and] fires, as well as [...] constant [rotation] of SES unit personnel to ensure the effective performance of official duties, particularly during [...] martial law.”
- 21 For safety reasons, public versions of datasets do not contain specific geolocations identified by us for most incidents of double-tap attacks and attacks on fire stations. However, we will consider individual requests for this data from law enforcement agencies, human rights defenders, academics, journalists, and other stakeholders for whom this information may be useful for further research and coverage of attacks on emergency responders in Ukraine and beyond.
- 22 This dataset does not include incidents in which responders were killed or injured by mine-blast trauma. While such incidents constitute a considerable proportion of casualties among emergency responders, they do not amount to direct and potentially deliberate attacks, as mines are inherently indiscriminate. That said, one could argue that civil defense personnel, who are primarily responsible for mine clearance, are exposed to a disproportionate level of risk of such trauma. Nevertheless, due to the narrow scope of this report, these cases are not included in the analysis.
- 23 SES response to an information request by Truth Hounds (January 7, 2026).
- 24 507 and 110, respectively.
- 25 415 and 34, respectively; on November 5, 2025, the Minister of Internal Affairs of Ukraine, Ihor Klymenko, noted on his Telegram channel that over the previous three months, Russian forces had carried out more than 60 attacks on State Emergency Service units, resulting in five deaths and over 30 emergency responders injured.
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- 26 The possible reasons for the differences in the figures between the TH monitoring and the SES data are explained in detail in the Methodology chapter.
- 27 Spohady Holovnoho upravlinnia DSNS Ukrainy u Donetskii oblasti (2024). Pankov Oleksii Serhiiovych
maior sluzhby tsyvilnoho zakhystu. Donetsk Regional State Administration, URL: https://dn.gov.ua/storage/app/sites/1/NewsODA2024/III_kvartal/Spogadi/3part/Pankov-Oleksij.pdf (accessed: 02.04.2026).
- 28 DSNS Ukrainy / Distalysia pokydky i do budivli Holovnoho upravlinnia DSNS Ukrainy u Donetskii oblasti... [@dsns_telegram], (10.03.2022). Telegram, URL: <https://archive.ph/Rs4kl> (accessed: 02.04.2026).
- 29 Holovne upravlinnia DSNS Ukrainy u Donetskii oblasti / Oleksandr Hurov — spravzhnii heroiryatuvai'nyk, yakyi bez vahan' i z velykoju vidvahoiu stv na zakhyst zhyttia liudei u naiskladnishi chasy [@DSNSDon], (04.06.2025). Facebook, URL: <https://www.facebook.com/DSNSDon/posts/> (accessed: 02.04.2026).
- 30 Oleksii Pankov. Knyha pam'iaty orhaniv systemy MVS, URL: <https://memory-book.mvs.gov.ua/pankov-oleksii-sergiiovic> (accessed: 04.02.2026).
- 31 Ibid.
- 32 This includes data from January 1 to October 31, 2025.
- 33 Truth Hounds interview with Viktor Likanov (September 10, 2025).
- 34 Written SES response to an information request by Truth Hounds (January 7, 2026).
- 35 Deep State, URL: <https://deepstatemap.live/> (accessed: 03.30.2026).
- 36 Detailed possible explanations for the geographical concentration of attacks in the frontline territories are discussed in Chapter 2.
- 37 More information about the possible reasons for the use of drones for attacks against emergency responders and what it means for intentionality can be found in Chapter 2.
- 38 Polishchuk, Olha; Vlas, Cristian (2026). Ukraine war: How six new trends are shaping the conflict. ACLED, URL: <https://acleddata.com/report/ukraine-war-how-six-new-trends-are-shaping-conflict> (accessed: 02.04.2026).
- 39 Truth Hounds (2025). Killzone: How Russian Drones Are Devastating the River Dniro's Right. P. 31. URL: <https://truth-hounds.org/en/cases/killzone-how-russian-drones-are-devastating-the-river-dniros-right-bank/> (accessed: 02.04.2026).
- 40 Truth Hounds interview with RE-018.
- 41 There have also been examples of remote mining of roads leading to regularly shelled localities, setting up booby traps during manual mining of territories, and other tactics that hinder demining. These may not target first responders alone, but they are likely to impede emergency response in frontline areas and humanitarian demining in de-occupied territories.
- 42 Ukrinform (2025). «Bili yanholy» ta «Feniks»: v Ukraini pratsiuie 51 evakuatsiina hrupa Natspolitsii ta DSNS. URL: <https://www.ukrinform.ua/rubric-society/4028327-bili-angoli-ta-feniks-v-ukraini-pracue-51-evakuacijna-grupa-nacpolicii-ta-dsns.html> (accessed: 02.04.2026).
- 43 Ibid.
- 44 Ministerstvo rozvytku hromad ta terytorii Ukrainy (2026). Minrozvytku: Oholosheno oboviazkovu evakuatsiiu ditei razom z batkami chy zakonnyim predstavnykamy iz piaty naselenykh punktiv Zaporizkoi oblasti. Government Portal, URL: <https://www.kmu.gov.ua/news/minrozvytku-oholosheno-oboviazkovu-evakuatsiiu-ditei-razom-z-batkamy-chy-zakonnyim-predstavnykamy-iz-piatty-naselenykh-punktiv-zaporizkoi-oblasti> (accessed: 02.04.2026).
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- 46 Holovne upravlinnia DSNS Ukrainy u Donetskii oblasti / Chervhovi voieniyni zlochyn: rosiiany znovu obstriliaty evakuatsiiu hrupu «FENIKS» [@DSNSDon], (08.25.2024). Facebook, URL: <https://www.facebook.com/DSNSDon/posts/pfbid0mAHLzqdvL9RGQ8unzQGWhfTAczjTPFk3VvXXfVLFPw9mCMF73LbLFNSG9afkQhI> (accessed: 02.04.2026); DSNS Ukrainy / Evakuatsiina hrupa DSNS potrapyla pid vorozhyi obstril na Donechchyni [@dsns_telegram], (09.11.2024). Telegram, URL: https://t.me/dsns_telegram/32425 (accessed: 02.04.2026); Holovne upravlinnia DSNS Ukrainy u Donetskii oblasti / Donechchyna: riatuvai'nyky pid pritsilnym vorozhyim vohnem [@DSNSDon], (05.23.2024). Facebook, URL: <https://www.facebook.com/DSNSDon/posts/pfbid0mmBC76QDTzAPwTLcKp8MjX9mRmKDhWCX1TShMWyFzSjKjheBT6xiDpC4iD3DCH6tFI> (accessed: 02.04.2026).
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- 50 Menshykova, Yelyzaveta; Hrebinnik, Dmytro (2025). Saper zahynuv pid chas rozminuvannya Kharkivshchyny: rosiiany vdaryly dronom v mashynu, koly vin zupynyvsia yii perevirity. Suspilne.Kharkiv, URL: <https://susplne.media/kharkiv/1040381-saper-zagynuv-pid-cas-rozminuvanna-harkivsin-rosiiani-vdarili-dronom-v-masinu-koli-vin-zupinivsa-i-pereviriti/> (accessed: 04.02.2026); DSNS Ukrainy / U rodyni DSNS znovu vtrata: na Kharkivshchyni zahynuv saper-mekhanik Vasyi Belinskyyi (@dsns_telegram), (06.11.2025). Telegram, URL: <https://archive.ph/rQaNw> (accessed: 02.04.2026).
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- 54 See for example: Truth Hounds, PEJ (2024). Submerged: Study of the Destruction of the Kakhovka Dam and Its Impacts on Ecosystems, Agrarians, Other Civilians, and International Justice. URL: <https://truth-hounds.org/en/cases/submerged-study-of-the-destruction-of-the-kakhovka-dam-and-its-impacts-on-ecosystems-agrarians-other-civilians-and-international-justice/> (accessed: 02.15.2026).
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- 63 Truth Hounds interview with RE-023.
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- 68 These clearly defined upper and lower thresholds of the time gap have been established based on the most typical intervals between attacks and are due to the need to set measurable criteria to verify cases of double-tap strikes. In reality, the gap between the attacks may be shorter or longer, depending on the circumstances. For instance, if an attack takes place near
- a fire department, the arrival of first responders who start addressing the consequences may start more quickly than in ten minutes. Conversely, if the first attack caused significant damage, first responders' work at the incident scene may last several days. Since we identified only a small number of such cases and they usually require assessing additional factors to qualify them as double-tap strikes, these episodes have been excluded from this analysis.
- 69 More details on the verification criteria and procedure are available in the codebook for the Double-Tap Strikes dataset, which is included in Appendix 3 of this study.
- 70 Importantly, in the previous study, the lower threshold for the time period to qualify the attack as a double-tap strike was five minutes rather than ten.
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- 72 As part of this study, we did not conduct a separate analysis of all incidents that showed signs of double-tap strikes and occurred in the presence of other emergency services or bystanders who provided assistance to the survivors. According to online monitoring by Truth Hounds, the number of all incidents with characteristics of double-tap strikes between February 24, 2022 and October 31, 2025 may well exceed 300, i.e., be at least twice as high as the scope covered by our analysis in this report.
- 73 The list of the 92 incidents includes 26 cases of double-tap strikes in the presence of first responders verified as part of the previous study, "Cruelty Cascade: Examining the Pattern of Russian Double-Tap Strikes in Ukraine." They were re-verified according to the updated methodology.
- 74 Archived links to video evidence can be found in the corresponding column of the "Double-Tap Strikes" dataset in Appendix 3.
- 75 Truth Hounds interview with RE-023; Truth Hounds interview with RE-024; Truth Hounds interview with RE-021.
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- 77 AP | Art. 65(1).
- 78 A detailed legal analysis of the use of the double-tap strike tactic against emergency services, particularly on the example of specific incidents, can be found in section 2.4 of the study "Cruelty Cascade: Examining the Pattern of Russian Double-Tap Strikes in Ukraine."
- 79 The analysis covers the period from February 24, 2022 to October 31, 2025.
- 80 More details about this are available in Chapter 3.
- 81 The Russian analog of YouTube.
- 82 More information about the rhetoric of Russian sources about the double-tap attack tactic and specific cases of its use in Ukraine can be found in Chapter 3.
- 83 Rybar / Krizisnye regiony mira: itogi 3-4 avgusta (@27303810), (08.04.2024). RuTube, URL: <https://rutube.ru/video/8d2d2fb86c9c26ed5fdb8a3f0858be76/> (accessed: 02.04.2026).
- 84 Truth Hounds interview with RE-017.
- 85 These data apply both to verified cases and suspected cases.
- 86 Raion is an administrative division in Ukraine that is smaller than oblast but larger than a hromada.
- 87 We collected data on the attack during a field mission in Kharkiv Oblast in the fall of 2025; Truth Hounds interview with RE-026.
- 88 The text has been edited for linguistic and stylistic reasons. Its meaning remains unchanged.
- 89 Name changed for security reasons.
- 90 Twenty-eight, including suspected incidents. Since only full quarters were included in the analysis, data for the first quarter of 2022 and the fourth quarter of 2025 are not shown in the graph.
- 91 We analyzed this case in detail in the previous report, "Cruelty Cascade: Examining the Pattern of Russian Double-Tap Strikes in Ukraine."
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- 93 Ibid.
- 94 Truth Hounds (2025). Killzone: How Russian Drones Are Devastating the River Dniipro's Right. P. 31. URL: <https://truth-hounds.org/en/cases/killzone-how-russian-drones-are-devastating-the-river-dniipros-right-bank/> (accessed: 02.04.2026).
- 95 Since this incident was not mentioned in open sources, it was not included in either the list of verified double-tap strikes or the expanded list of incidents that have characteristics of double-tap strikes, and therefore was not included in the calculations. This once again demonstrates that the real number of double-tap strikes may be significantly higher than the estimates we have recorded based on open-source monitoring.
- 96 Truth Hounds interview with RE-023.
- 97 Within the scope of this study, frontline areas are defined as those that, according to the Ministry for Development of Communities and Territories of Ukraine, were, at the time of the attack, included in the list of territories where hostilities were being conducted, were ongoing, or could potentially occur: Ministerstvo rozvytku hromad ta terytorii Ukrainy (2025). Perelik terytorii, na yakykh vedut'sia (velysia) boiovi dii abo tymchasovo okupovanykh Rosiiskoiu Federatsiui. Verkhovna Rada of Ukraine, URL: <https://zakon.rada.gov.ua/laws/show/z0380-25#Text> (accessed: 02.05.2026).
- 98 Natsionalna politisia Ukrainy (2024). Na Khersonshchyni cherez rosiiski obstrily postrazhdaly 10 liudey, sered nykh politseiski, riaduvalnykh ta volonteriv, politisia fiksue naslidky. URL: <https://npu.gov.ua/news/na-khersonshchyni-cherez-rosiiski-obstrily-postrazhdaly-10-liudei-sered-nykh-politseiski-riaduvalnykh-ta-volonteriv-politisia-fiksue-naslidky> (accessed: 02.05.2026).
- 99 Menshykova, Yelyzaveta; Hrebinnik, Dmytro (2025). Rosiiany zavdaly podviinoho udaru po likarni v Kharkivskoi oblasti. Suspilne.Kharkiv, URL: https://susplne.media/kharkiv/970241-rosiiani-zavdali-podviynogo-udaru-po-likarni-v-harkivskij-oblasti/?utm_source=copypink&utm_medium=ps (accessed: 02.05.2026).
- 100 Truth Hounds interview with RE-026.
- 101 Truth Hounds interview with RE-001.

- 102 Truth Hounds interview with RE-026; Truth Hounds interview with RE-018.
- 103 Truth Hounds interview with RE-018.
- 104 Truth Hounds interview with RE-020.
- 105 Jasani, Gregory N.; Cavaliere, Garrett A.; Tian, LinLin; Liang, Stephen Y.; Lawner, Benjamin J. (2023). Terrorist Attacks Against Firefighters, 1970–2019. *Health Security*. 21(2). PP. 141–145. ("The loss of life among firefighters may be further compounded by the preventable deaths of victims who could have been saved with timely rescue and emergency care").
- 106 Narang, Neil; Stanton, Jessica A. (2017). A Strategic Logic of Attacking Aid Workers: Evidence from Violence in Afghanistan. *International Studies Quarterly* 61. PP. 38–51. URL: <https://sci-hub.box/10.1093/isq/sqw053> (accessed: 02.19.2026). ("Insurgents thus target aid workers in an effort to force them out of particular regions, undermining government support").
- 107 Dual-use objects may include bridges, highways, civilian airports, and other facilities that, by their nature, location, purpose, or actual use, are capable of making an effective contribution to military operations. Attacks on such objects can be considered lawful only if the conditions prescribed by international humanitarian law are met and require individual legal analysis under the lens of Article 52(2) of Additional Protocol I.
- 108 AP I Art. 65(1)(2).
- 109 Additional Protocol I. See section 2.4 for further legal analysis.
- 110 Truth Hounds interview with RE-028.
- 111 Biedna, Alla; Liakh, Viktoriia (2025). «Nas vidkynulo udarnou khvileiu»: riatsuvalnyky rozpovyli pro podviini udary RF u Nizhyni ta Bakhmachi. *Suspilne.Chernihiv*, URL: <https://suspilne.media/chernihiv/1124725-nas-vidkynulo-udarnou> (accessed: 02.05.2026).
- 112 Frontovaia ptichka / Na etoi nedele moment prileta Gerani po neftebaze snial ukrainskii pozharnyi [@frontbird], (09.28.2025). Telegram, URL: <https://archive.ph/Rx4JL> (accessed: 02.05.2026).
- 113 Truth Hounds interview with RE-020.
- 114 The possible reasons for differences in the figures between the TH and the SES data are explained in detail in the Methodology.
- 115 For security reasons, access to the database containing the identified geolocations of damaged or destroyed rescue facilities can only be provided upon request.
- 116 More details on the criteria are available in the Codebook for the Attacks on Rescue Buildings database, which is included in Appendix 2 to this report.
- 117 Data as of October 31, 2025.
- 118 Within this study, frontline areas are those which, according to the Ministry for Development of Communities and Territories of Ukraine, were included in the list of territories with past, current or possible active hostilities at the time of the attack: Ministerstvo rozvytku hromad ta terytorii Ukrainy (2025). *Perelik terytorii, na yakykh vedut'sia (velysia) boiovi dili abo tymchasovo okupovanykh Rosiiskoiu Federatsiiu*. Verkhovna Rada of Ukraine, URL: <https://zakon.rada.gov.ua/laws/show/z0380-25#Text> (accessed: 02.05.2026).
- 119 Deep State, URL: <https://deepstatemap.live/> (accessed: 02.14.2026).
- 120 Population of Nikopol. Minfin, URL: <https://index.minfin.com.ua/ua/reference/people/town/nikopol/> (accessed: 02.14.2026); Population of Kostiantynivka. Minfin, URL: <https://index.minfin.com.ua/ua/reference/people/town/konstantinovka/> (accessed: 02.14.2026).
- 121 Stepnohirsk community, Zaporizhzhia oblast. Gromada.info, URL: <https://gromada.info/gromada/stepnogirsk/> (accessed: 02.14.2026).
- 122 The State Emergency Service of Ukraine. Map. URL: <https://dsns.gov.ua/map-departments> (accessed: 02.14.2026).
- 123 In August 2025, a photographer Diego Herrera published a post stating that the SES crew was forced to withdraw from Kostiantynivka due to significant damage to fire and rescue unit building. Kostiantynivka MIY DIM / Iz Kostiantynivky vyvely pidrozdiil DSNS [@KonstantinovkaDnUA], (08.27.2025). YouTube, URL: <https://www.youtube.com/watch?v=KW5-ryR0rew> (accessed: 02.14.2026).
- 124 Truth Hounds interview with Viktor Likanov (September 10, 2025).
- 125 In total, we identified six incidents when the double-tap tactic was used on the territory of fire and rescue units. They can be found in the Attacks on Fire Stations database, which is included in Appendix 3, using the filter in the "Double-Tap" column.
- 126 SICHEMO | pro ZAPORIZHZHIA / «Pam'iataiu tilky vybukh, a potim vidkryvaiu ochi — i vse potemnilo vid haru», — zhadue moment vorozhoho obstrilu pozhezhnoyi chastyny riatsuvalnyk DSNS Vasyli Yemelianchenko [@sichemo_zp], (06.03.2025). Telegram, URL: <https://archive.ph/B4ms9> (accessed: 02.14.2026); MTM ZAPORIZHZHIA / Na chasi — Ataka rosilian po riatsuvalnykakh u Stepnohirsku [@tvmtonline], (06.03.2025). Youtube, URL: <https://www.youtube.com/watch?v=FgJOE9W4EQg> (accessed: 02.14.2026).
- 127 SICHEMO | pro ZAPORIZHZHIA / Tse buv udar FPV-dronom. Riatsuvalnyky evakuivaly na broneavtomobili, — v DSNS rozpovyli pro siohodnishniu povtornu ataku rosilian po pozhezhnomu avtomobiliu u pryfrontovii hromadi Vasylyvskoho raionu [@sichemo_zp], (06.03.2025). Telegram, URL: <https://archive.ph/RGf1w> (accessed: 02.15.2026).
- 128 MTM ZAPORIZHZHIA / Na chasi — Ataka rosilian po riatsuvalnykakh u Stepnohirsku [@tvmtonline], (06.03.2025). Youtube, URL: <https://www.youtube.com/watch?v=FgJOE9W4EQg> (accessed: 02.14.2026).
- 129 DSNS Ukrainy / rosiiski okupanty znovu atakuiut riatsuvalnyky: postrazhdaly 4 fakhivtsiv [@dsns_telegram], (06.02.2025). Telegram, URL: <https://archive.ph/pxKup> (accessed: 02.15.2026).
- 130 Svystukha, Daria (2022). Nichnyi obstril Mykolaieva. Shcho vidomo pro zahyblukh. *Suspilne.Mykolaiv*, URL: <https://suspilne.media/mykolaiv/294248-nicnij-obstril-mikolaieva-so-vidomo-pro-zagiblin/> (accessed: 02.15.2026).
- 131 Tsomyk, Hanna; Haika, Nikita (2025). «FAB-1500 postaviv zhyrnu krapku». U Kupiansku rozbyraiut zavalu znyshchenoi RF pozhezhnoi chastyny. *Suspilne.Kharkiv*, URL: <https://suspilne.media/kharkiv/1013243-fab-1500-postaviv-zirnu-krapku-u-kupiansku-rozbyraut-zavali-znisenoj-rf-pozeznoi-castini/> (accessed: 02.15.2026).
- 132 Overall, there was digital evidence of damage in approximately 53% of incidents. Most of it was provided by official sources (SES, MIA, local administrations, etc.).
- 133 AP I Art. 52(2).
- 134 A Territorial Center for Recruitment and Social Support is a military management agency in Ukraine that carries out military accounting and the military draft.
- 135 Truth Hounds sources.
- 136 DSNS Ukrainy / Punkty nezlamnosti DSNS staiut ostrivtsem tepla ta svitla dla doroslykh ta malenykhyh ukrainsiv [@dsns_telegram], (10.22.2025). Telegram, URL: <https://archive.ph/BWCKI> (accessed: 02.15.2026).
- 137 Punkt nezlamnosti, URL: <https://nezlamnist.gov.ua/> (accessed: 02.15.2026).
- 138 Truth Hounds interview with RE-020; GoogleMaps (2026). Ukryttia dla naselennia m. Kyieva. URL: https://www.google.com/maps/d/u/0/viewer?mid=1nv3QreO1QS5_AmRRNLHXu7u99sKJ6JRR&ll=50.40136449034026%2C30.51365240979856&z=18 (accessed: 02.19.2026).
- 139 Horpinchenko, Nastia (2022). Misto u vohni: yak pratsiuiut riatsuvalnyky u Bakhmuti. *Slidstvo.info*, URL: <https://www.slidstvo.info/warnews/misto-u-vogni-yak-pracyuyut-ryatsuvalnyky-u-bahmuti/> (accessed: 02.15.2026).
- 140 Kabinet Ministriv Ukrainy (2013). Kryterii utvorennia derzhavnykh pozhezhno-riatsuvalnykh pidrozdiiliv (chastyn) Operatyvno-riatsuvalnoi sluzhby tsyvilnoho zakhystu v administratyvno-terytorialnykh odynitsiakh. Verkhovna Rada of Ukraine, URL: <https://zakon.rada.gov.ua/laws/show/874-2013-%D0%BF#Text> (accessed: 02.15.2026).
- 141 Hubareva, Viktoriia (2022). Dobrovliniy pozhezhnyi rukh: yak tse pratsiuiie i v chomu koryst dia hromad? Rubryka, URL: <https://rubryka.com/article/voluntary-fire-brigade/> (accessed: 02.15.2026).
- 142 Written SES response to an information request by Truth Hounds (January 7, 2026).
- 143 According to Serhii Kudin, Deputy Director of the Civilian Protection Activities Department of the SES, achieving this response time would require an additional 1,307 local and voluntary firefighting units.
- 144 The Oleksandr Razumkov Ukrainian Centre for Economic and Political Research (Razumkov Centre) is a Ukrainian non-governmental think tank that conducts research in the spheres of politics, economy, security and defense, and public relations.
- 145 Razumkov Centre (2025). Assessment of the Situation in the Country, Trust in Social Institutions, Assessment of Problems in the Ukrainian Society (November 2025). URL: <https://razumkov.org.ua/napriamky/sotsiologichni-doslidzhennia/otsinka-sytuatsii-v-kraini-dovira-do-sotsialnykh-institutiv-otsinka-problem-shcho-isnuie-u-ukrainskomu-suspilstvi-lystopad-2025> (accessed: 02.15.2026).
- 146 Hultman, Lisa. The Power to Hurt in Civil War: The Strategic Aim of RENAMO Violence. *Journal of Southern African Studies*, vol. 35, no. 4, 2009, pp. 821–34. JSTOR, URL: <https://www.jstor.org/stable/40600031> (accessed: 02.15.2026).
- 147 Truth Hounds interview with RE-020.
- 148 Kostiantynivska miska viiskova administratsiia (2025). Kostiantynivska miska terytorialna hromada, sytuatsiia stanom na 26.08.2025. URL: <https://konstrada.gov.ua/novini/10802-kostyantynivska-miska-teritorialna-gromada-situatsiia-standom-na-26-08-2025> (accessed: 02.15.2026).
- 149 Holovne upravlinnia DSNS Ukrainy u Donetskii oblasti / Kostiantynivka: voroh vkotre vdaryv po pozhezhno-riatsuvalnii chastyni [@DSNSDon], (08.26.2025). Facebook, URL: <https://www.facebook.com/DSNSDon/posts/> (accessed: 02.15.2026).
- 150 At the same time, even if rescue crews leave a certain locality, the SES continues to provide limited services, such as evacuation of civilians, as long as possible. Such operations are extremely risky for rescue personnel.
- 151 Kostiantynivka MIY DIM / Iz Kostiantynivky vyvely pidrozdiil DSNS [@KonstantinovkaDnUA], (08.27.2025). YouTube, URL: <https://www.youtube.com/watch?v=KW5-ryR0rew> (accessed: 02.15.2026).
- 152 Diego Herrera / [ES] 1-3 Paramedicos trasladan a dos civiles heridos en Kostiantynivka, Ucrania, Agosto 2025 [@diegoherraphotjournalist], (09.03.2025). Instagram, URL: <https://www.instagram.com/p/DOJg5ZvCuUp/> (accessed: 02.15.2026).
- 153 AP I Art. 52; RS Art. 8(2)(b)(i).
- 154 The level of data verification may vary; therefore, such figures should be treated with caution.
- 155 White Helmets (2025). Double-tap attacks against White Helmets volunteers. P. 1. URL: <https://whitehelmets.org/sites/whitehelmets.org/files/2025-08/> (accessed: 02.15.2026).
- 156 Note: HTS is a Sunni Islamist political organization with a paramilitary wing that actively participated in the Syrian civil war and played an important role in the overthrow of the Bashar al-Assad regime in December 2024.
- 157 Syria Civil Defense (White Helmets) (2025). Double-tap attacks against White Helmets volunteers. P. 18. ReliefWeb, URL: <https://reliefweb.int/report/syrian-arab-republic/double-tap-attacks-against-white-helmets-volunteers-enar> (accessed: 02.15.2026).
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- 160 AP I Art. 61.
- 161 AP I Art. 61.
- 162 Cabinet of Ministers of Ukraine (2015). Regulation on the State Emergency Service of Ukraine. Verkhovna Rada of Ukraine, URL: <https://zakon.rada.gov.ua/laws/show/1052-2015-%D0%BF#Text> (accessed: 02.05.2026); Cabinet of Ministers of Ukraine (2023). Procedure for the Formation and Operation of Fire and Rescue Units to Ensure Local Fire Defense. Verkhovna Rada of Ukraine, URL: <https://zakon.rada.gov.ua/laws/show/315-2023-%D0%BF#Text> (accessed: 05.02.2026); Cabinet of Ministers of Ukraine (2023). Procedure for the Formation and Operation of Fire and Rescue Units to Ensure Voluntary Fire Defense. Verkhovna Rada of Ukraine, URL: <https://zakon.rada.gov.ua/laws/show/314-2023-%D0%BF#Text> (accessed: 02.05.2026).
- 163 AP I Art. 61.
- 164 AP I Art. 62.

- 165 Commentary Drafts O.R. XIII, P. 367, CDDH/406/Rev.1, para. 46; ICRC Commentary (1987), AP I Art. 62. URL: <https://ihl-databases.icrc.org/en/ihl-treaties/api-1977/article-62/commentary/1987> (accessed: 02.05.2026).
- 166 AP I Art. 48.
- 167 Ibid.; Henckaerts, J.-M., and Doswald-Beck, L. (2005). Customary International Humanitarian Law, Vol. I, Rules 1 and 7, Cambridge University Press.
- 168 AP I Art. 51(5)(b).
- 169 Ibid.
- 170 AP I Art. 65 (1).
- 171 Ibid.
- 172 Ibid.
- 173 AP I Art. 65 (1).
- 174 AP I Art. 65 (3).
- 175 AP I Art. 65 (2).
- 176 Truth Hounds Interview with RE-023; Truth Hounds interview with RE-024.
- 177 Ibid.
- 178 AP I Art. 65 (2).
- 179 Ibid.
- 180 AP I Art. 65(1)(2).
- 181 RS Art. 8(2)(b)(i).
- 182 AP I Art. 52(1).
- 183 Ibid.
- 184 See AP I, art. 52(1)-(3) (defining civilian objects as all objects that are not military objectives, limiting attacks strictly to military objectives, and providing that, in case of doubt, an object normally dedicated to civilian purposes shall be presumed not to be used for military action).
- 185 AP I Art. 52(2).
- 186 Ibid.
- 187 Ibid. emphasis added.
- 188 ICRC Commentary (1987), AP I Art. 52. URL: <https://ihl-databases.icrc.org/en/ihl-treaties/api-1977/article-52/commentary/1987> (accessed: 02.05.2026).
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- 193 Ibid. Cl. 9.
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- 196 Chapter 4; See: Truth Hounds interview with RE-020; For example: GoogleMaps (2026). Ukrytí díla naselennia m. Kyieva. URL: https://www.google.com/maps/d/u/0/viewer?mid=Inv3QreO1Q55_AmRRNLHXu7u99sKJ6JRR&ll=50.40136449034026%2C30.51365240979856&z=18 (accessed: 02.19.2026).
- 197 Chapter 4; See: Invincibility Point, URL: <https://nezlamnist.gov.ua> (accessed: 02.15.2026).
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- 203 AP I Art. 57(2)(a)(i).
- 204 AP I Art. 52(1).
- 205 RS Art. 8(2)(b)(iii).
- 206 ICRC. Rule 2. Violence aimed at spreading terror among the civilian population. Customary International Humanitarian Law Database, URL: <https://ihl-databases.icrc.org/en/customary-ihl/vi/rule2> (accessed: 15.02.2026).
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- 209 ICRC Commentary (1987), AP I Art. 51. URL: <https://ihl-databases.icrc.org/en/ihl-treaties/api-1977/article-51/commentary/1987> (accessed: 02.05.2026).
- 210 Ibid.
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- 222 Ministry of Internal Affairs of Ukraine (2018). Statut dii u nadvychaynykh sytuatsiyakh orhaniv upravlinnia ta pidrozdiiv Operatyvno-riatualnoi sluzhby tsyvilnoho zakhystu. URL: <https://zakon.rada.gov.ua/laws/show/z0801-18#Text> (accessed: 02.24.2026).
- 223 ICTY (2016). Prosecutor v. Radovan Karadžić. Case No. IT-95-5/18-T. Judgment. PP. 1862–1868. URL: https://www.icty.org/x/cases/karadzic/tjug/en/160324_judgement.pdf (accessed: 02.24.2026).
- 224 Moreover, conduct potentially qualifying as terrorizing the civilian population is not limited to attacks on emergency responders. A similar analytical framework may be applied to systematic short-range drone attacks against civilians, as well as to strikes on hotels or other facilities which, by virtue of their function and purpose, are likely to accommodate journalists, humanitarian personnel, and other civilians.
- 225 More information about OMDK, its history, owner, and affiliation is available in the study by Truth Hounds (2025). Killzone: How Russian Drones Are Devastating the River Dnipro's Right Bank. P. 43–45. URL: <https://truth-hounds.org/en/cases/killzone-how-russian-drones-are-devastating-the-river-dnipro-right-bank/> (accessed: 02.18.2026).
- 226 Ot Mariupolia do Karpat / Vazhno!! DSNs. Gosudarstvennaya sluzhba ukrainy po chrezvychnym situatsiyam [osvedomitel_alex], (05.07.2025). Telegram, URL: <https://archive.ph/wu8y6> (accessed: 18.02.2026).
- 227 The analysis was carried out manually using keywords ("ДЧС", "ГСЧС", "спасатель", "пожарный", "пожарник," etc. ("SES," "emergency responder," "firefighter") in the Truth Hounds' database of over 100 Telegram channels. At the final stage of the analysis, we also used the TeleZip Telegram bot to identify additional sources.
- 228 The sample only includes original posts and excludes reposts It does, however, include posts that exactly repeat content from other channels if the channel author published them as that channel's own original post.
- 229 The list includes the channels containing significant mentions of Ukrainian emergency responders, emergency workers' infrastructure and equipment, as well as the SES as a government institution. Technical references (for example, the SES as the source of photos or videos of destruction) were not included in the analysis. Most of the channels we analyzed did not contain significant mentions that met the sampling criteria. This indicates that the focus on Ukrainian emergency responders or the SES is characteristic of a specific segment of pro-Russian Telegram channels—mostly ones connected or associated with specific units of the Russian army.
- 230 On September 1, 2025, Oleksii Kostrubyskiy (Russian: Alexei Kostrubitskiy) was appointed the Deputy Minister of Russia for Civil Defense, Emergencies, and Disaster Relief. See: Ukaz Prezidenta Rossiiskoi Federatsii ot 01.09.2025 № 619 «O zamestele Ministra Rossiiskoi Federatsii po delam grazhdanskoi oborony, chrezvychnym situatsiyam i likvidatsii posledstvií stikhiinykh bedstvií». URL: <http://publication.pravo.gov.ru/document/0001202509010007> (accessed: 02.18.2026).
- 231 Infantriý | Donetskaya pekhota / Obrashchenie Ministra MChS DNR general-leitenanta sluzhbi grazhdanskoi zashchity Kostrubitskogo A.A. k sotrudnikam GSChS Ukraini [@infantriý.1], (03.02.2022). Telegram, URL: https://web.archive.org/web/2025111120641/https://t.me/infantriý_1/13293 (accessed: 02.18.2026).
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- 233 338 / Minoborony Rossii utochnilo, chto aktualiziruet statistiku poter VSU, NGU i bandformirovanií, kotorym Kiev dal nazvanie «voiskovaya chast» s nomerom na osnove dokumentatsii protivoborstvuyushchei storony — otchet, radioperekhvaty [@go338], (04.17.2022). Telegram, URL: <https://archive.ph/qHf2c> (accessed: 02.18.2026).
- 234 338 / V poslednie dve — tri nedeli nablyudaetsya sushchestvennyy prirost poter u spasatelei (GSChS) [@go338], (12.25.2022). Telegram, URL: <https://archive.ph/Kuqzq> (accessed: 02.18.2026).
- 235 Cargo 200 stands for "irrecoverable losses" (i.e., soldiers killed in action); cargo 300 is a code for the wounded soldiers.
- 236 The claim that SES emergency responders are military personnel is false. The SES is not a military structure, but a national civil protection service. Its activities are directed and coordinated by the Cabinet of Ministers of Ukraine through the Minister of Internal Affairs. At the same time, SES emergency responders may participate in responding to attacks on military facilities and, if necessary, coordinate these activities with the military. As stated in Chapter 2, under AP I to the Geneva Conventions, such work does not strip them of protection nor make them a legitimate target.
- 237 For instance, «Ot Mariupolia do Karpat» / My preduprezhdaem spets. sluzhby, kotorye budut zadeshtovany v likvidatsii posledstvií [osvedomitel_alex], (10.29.2024). Telegram, URL: <https://archive.ph/egDys> (accessed: 02.18.2026).
- 238 Chapter 1.
- 239 For example, Minoborony Rossii / Svodka Ministerstva oborony Rossiiskoi Federatsii o khode provedeniya spetsialnoi voennoi operatsii (po sostoyaniyu na 8 avgusta 2023 g.) [@

- mod_russia], (08.08.2023). Telegram, URL: <https://archive.ph/dcc4F> (accessed: 02.18.2026).
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- 241 As of October 31, 2025, the channel had 1.2 million followers.
- 242 Dva maiera / Spravochnaia informatsiia o tom, kakie vedomstva protivnika otnosyatsia k sektoru sil bezopasnosti i oboronu [@dva_majors], (05.27.2023). Telegram, URL: <https://archive.ph/Tumb1> (accessed: 02.18.2026).
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- 245 Kuvalda | Vorschlaghammer | Massette | Sledgehamm / Nikopolskaya reznya - snova pod svino rez popali khokhlyatskie ryatuvalniki [@DPRInfantry], (07.17.2025). Telegram, URL: <https://archive.ph/vdPMX> (accessed: 02.18.2026).
- 246 Wagner v Telegram / Khorosho priletelo v Pokrovsk (08.08.2023). Telegram, URL: <https://posting.cc/gallery/zBdMTqC> (accessed: 02.18.2026). "Bandera" refers to Stepan Bandera, a Ukrainian nationalist figure who died in 1959 and whose name Russian propaganda often uses as a slur for Ukrainians.
- 247 Andrii Omelchenko. Memory book MVS, URL: <https://memory-book.mvs.gov.ua/omelchenko-andrii-ivanovic> (accessed: 02.18.2026).
- 248 As of November 4, 2025, there is no evidence of military targets at the site of the strike. Kazachya Lopan Z / Teper samoe interesnoe. Mnogie uzhe videli video <https://t.me/kozacha23/27229> iz Kharkova s goryashchim hipermarketom «Epitsentr», gde takzhe byli vzryvy, pokhozhie na detonatsiyu boeprispasov [@kozacha23], (05.26.2024). Telegram, URL: <https://archive.ph/8PcKd> (accessed: 02.18.2026).
- 249 Truth Hounds interview with RE-001; Truth Hounds interview with RE-004; Truth Hounds interview with RE-014; Truth Hounds interview with RE-017.
- 250 338 / Likvidirovannye 26 aprelya v Bakhmute kanadskie grazhdane Kail Porter (27 let) i Koul Zelenko (21 god) kak i drugie kanadtsy zakhodili na Ukrainu po humanitarnoi linii [@go338], (05.02.2023). Telegram, URL: <https://archive.ph/QkF8Z> (accessed: 02.18.2026).
- 251 Fireforce Ventures Founder, HERO. Fireforce Ventures, URL: <https://www.fireforceventures.com/in-memori.html> (accessed: 02.18.2026); CIRO / It is with great sadness that we must announce the death of one of our CIRO (Canadian International Rescue Organization) members [cirorescue], (05.05.2023). Instagram, URL: <https://www.instagram.com/p/Cr4EN4bLqts/> (accessed: 02.18.2026).
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- 257 Ibid.
- 258 Ibid.
- 259 Database. EUvsDisinfo, URL: <https://euvsdisinfo.eu/disinformation-cases/> (accessed: 02.18.2026); the message was identified using keywords "mercenaries" and "foreign mercenaries."
- 260 For example, Disinfo: Four new foreign mercenaries eliminated in the Special Military Operation (2025). EUvsDisinfo, URL: <https://euvsdisinfo.eu/report/four-new-foreign-mercenaries-eliminated-in-the-special-military-operation/> (accessed: 02.18.2026).
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- 262 As part of this study, dehumanizing rhetoric means statements that aim to deprive a certain individual or group of individuals of "human features," making empathy towards them unnecessary, and various forms of violence morally simple and justified; Volpato, Chiara; Andrighetto, Luca (2015). Dehumanization. International Encyclopedia of the Social & Behavioral Sciences, 2nd ed., Vol. 6, Elsevier. PP. 417–423. URL: <https://www.sciencedirect-com.ezproxy.its.uu.se/science/article/pii/B978008097086824035X> (accessed: 02.18.2026).
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- 288 Drone detectors are a type of electronic signals intelligence (ELINT) that help detect airborne threats early by picking up radio signals and frequencies. Their use has spread with the rise in UAVs. Because they are relatively cheap and effective, civilians also use them, including volunteers and the Ukrainian Red Cross Society. Truth Hounds interview with RE-018.
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- 290 Truth Hounds interview with RE-001; Truth Hounds interview with RE-002.
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SES emergency responders near a civilian high-rise building damaged by a combined Russian missile and long-range drone attack on Kyiv on November 25, 2025, which killed seven people and injured 21.

Source: Pavlo Petrov, Spokesperson for SES Kyiv.

This Truth Hounds report analyzes Russian attacks on emergency responders in Ukraine from February 24, 2022 to October 31, 2025. It identifies recurring patterns of such attacks in time, geography and weapon type, examines possible rationales, and assesses the implications for emergency response efforts in Ukraine. It pays particular attention to two widespread forms of attack: double-tap strikes and attacks on fire stations. The report also considers possible legal characterizations of such attacks under international humanitarian law and, where relevant, the Rome Statute.