

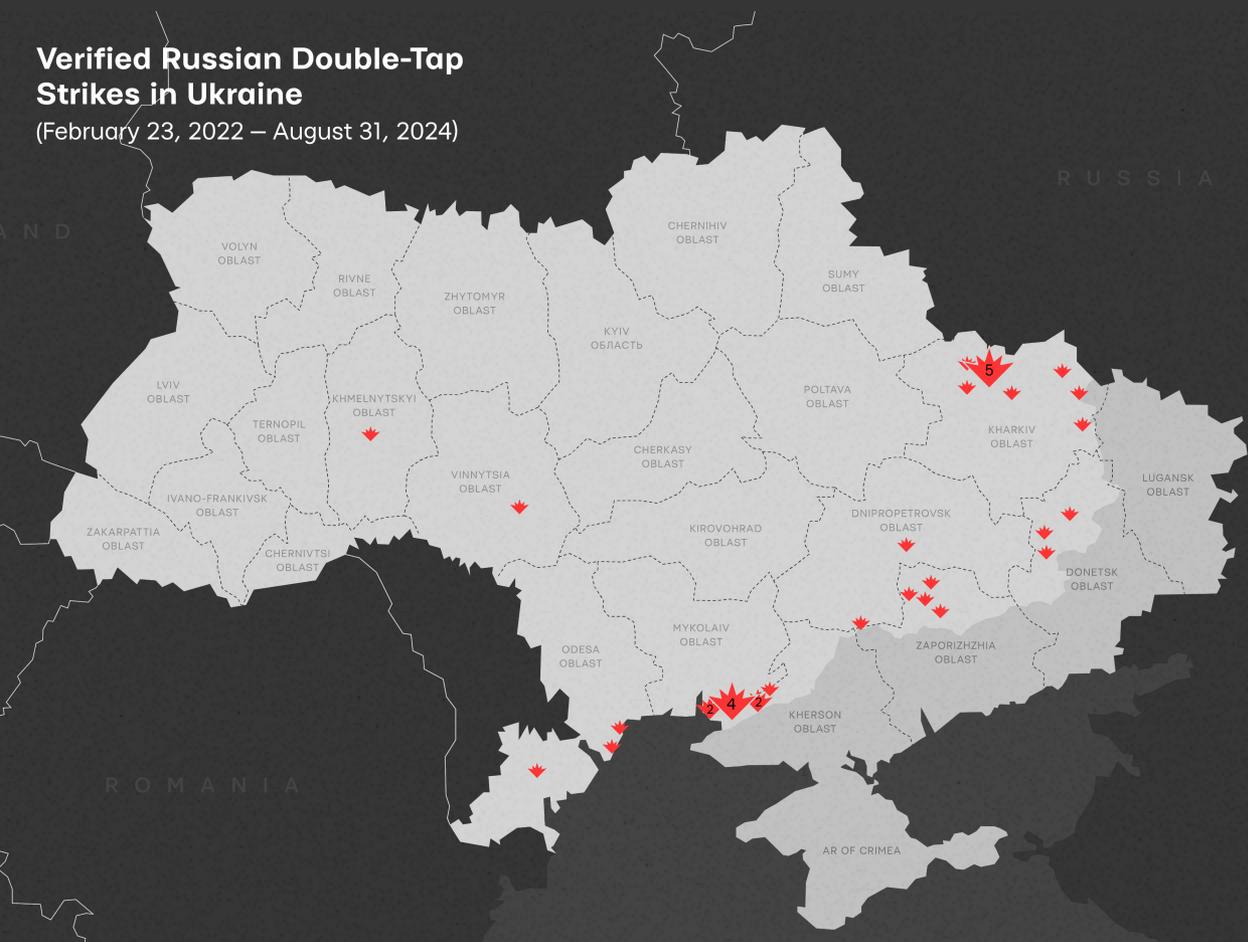
ANNEX I

Cruelty Cascade:
Examining the Pattern of Russian
Double-Tap Strikes in Ukraine

**Verified Russian Double-Tap
Strikes in Ukraine (24 February
2022 – 31 August 2024)**

Verified Russian Double-Tap Strikes in Ukraine

(February 23, 2022 – August 31, 2024)



Nº	DATE	LOCATION	CIRCUMSTANCES	APPROXIMATE NUMBER OF CASUALTIES	LIKELY USED IN FOLLOW-UP STRIKES
1	1 March 2022	Kharkiv	The Kharkiv Regional State Administration building was targeted by two cruise missiles: the first missile struck the square in front of the building at 8:01 AM, followed by a second missile hitting the roof of the building 12 minutes later.	44 dead, 15 injured	3M54-1 <i>or</i> 9M727 / 9M728 / 9M729
2	17 March 2022	Kharkiv	Around 1:00 PM, Russian forces shelled Barabashovo, Ukraine's largest market, with rockets launched from a Grad BM-21 multiple rocket launcher. While firefighters were extinguishing the resulting blaze, a second attack occurred at approximately 2:40 PM, resulting in the death of one firefighter and injuring at least one other.	1 dead, 1 injured	Rocket artillery
3	18 March 2022	Natalivka, Zaporizhzhia Oblast	Around 8:00 AM, Russian rocket artillery shelled a military training ground, as well as an adjacent factory and quarry in the village of Natalivka. A few hours later, when the team of firefighters were extinguishing the resulting fire, they were caught by a follow-up shelling. Nine people were killed as a result of the attack, including one rescuer. Five more rescuers were injured.	9 dead, 22 injured	Rocket artillery
4	10 April 2022	Dnipro	Around 10:00 AM, a Russian missile hit the airport in the city of Dnipro. The second attack followed around 12:00 PM, injuring six SES workers who were responding at the airport. One of them died from their injuries 11 months later.	1 dead, 5 injured	Missiles (type unidentified)

5	14 August 2022	Bilytske, Donetsk Oblast	Russian forces shelled a warehouse in Bilytske in the afternoon. When firefighters arrived to put out the fire, the warehouse was attacked again. One firefighter was injured and another died in the hospital from their injuries.	1 dead, 2 injured	Barrel artillery
6	11 October 2022	Ladyzhyn, Vinnytsia Oblast	Around 7:40 AM, two Shahed-136/131 drones struck the Ladyzhyn Power Station in an initial strike. The second drone strike occurred around 11:35 AM, injuring six people.	6 injured	Shahed-136/131
7	23 February 2023	Dvorichna, Kharkiv Oblast	At approximately 10:00 AM, Russian forces launched an attack on Dvorichna, heavily damaging the building of the village council administration and killing two people. As rescuers arrived and began their operations, Russian forces struck again with artillery.	2 dead, 2 injured	Barrel artillery
8	27 February 2023	Khmelnytskyi	Around 2:00 AM, a Shahed drone attacked a military base in Khmelnytskyi. Firefighters and medics arrived after the first strike, but a second attack 35 minutes later resulted in the deaths of two firefighters and injuries to three others. At 3:12 AM, a third Shahed drone hit the base with no casualties.	2 dead, 3 injured	Shahed-136/131
9	March 2023	Ivanivka, Kherson Obast	While responding to the aftermath of shelling, firefighters came under a follow-up strike. As a result of this attack, two firefighters were wounded.	2 injured	Unidentified
10	10 June 2023	Velykyi Burluk, Kharkiv Oblast	Around 2:30 AM, a drone strike ignited a fire in a two-storey building. When firefighters arrived to respond to the blaze, they were hit by a subsequent attack approximately an hour later. This attack resulted in the death of one firefighter and injury to another.	1 dead, 1 injured	Drone (type unidentified)

11	21 July 2023	Pavlivka, Odesa Oblast	Two Russian Kalibr 3M54-1 missiles hit a granary in the village of Pavlivka around 4:30 AM. Workers from the granary and firefighters arrived at the site after the attack. Within an hour, another Kalibr 3M54-1 missile hit the enterprise, injuring two granary workers and damaging two fire engines.	2 injured	3M54-1
12	3 August 2023	Kherson	Around 6:40 AM, Russian artillery shelled the centre of Kherson, damaging a trolleybus and a church. Three local residents were injured. Later on, around 7:50 AM, the area was shelled again. Four firefighters at the scene of the attack were injured.	7 injured	Barrel artillery
13	7 August 2023	Pokrovsk, Donetsk Oblast	A Russian cruise missile hit a residential building in downtown Pokrovsk at 7:15 PM, killing and injuring civilians. Close to 40 minutes later, a second missile hit the closed hotel next to the damaged residential building, killing and injuring more local residents and first responders.	10 dead, 93 injured	9M727 / 9M728 / 9M729
14	7 August 2023	Kruhliakivka, Kharkiv Oblast	At approximately 7:45 PM, the village of Kruhliakivka was attacked with four aerial bombs. When firefighters and police officers arrived at the scene, the area was subsequently shelled with cluster munitions. The attack resulted in injuries to two firefighters and two police officers.	3 dead, 9 injured	Rocket artillery
15	13 October 2023	Nikopol, Dnipropetrovsk Oblast	Around 12:00 PM, Russian forces shelled Nikopol with artillery, setting a bus on fire. When firefighters arrived at the scene, they were targeted by a subsequent shelling. Two rescuers sustained injuries and their vehicle was also damaged.	2 injured	Barrel artillery
16	15 November 2023	Zariche, Zaporizhzhia Oblast	Around 9:50 AM, two cruise missiles hit a school building in the village of Zariche within a few minutes of each other. Around 10:18 AM, the third strike	2 dead, 7 injured	9M727 / 9M728 / 9M729

			followed, killing two firefighters and injuring three more. At least seven people were wounded altogether.		
17	15 March 2024	Odesa	At 11:04 AM, a 9M723 missile hit a sanatorium building where a military unit was quartered. Seventeen minutes later, when first responders and military officers arrived at the scene, the second missile hit the building. As a result of the second strike, two firefighters, two police officers, and a medic were killed.	21 dead, 75 injured	9M723
18	23 March 2024	Kharkiv	Around 1:00 AM, a Shahed drone hit a sanatorium building in Kharkiv that then caught fire but resulted in no casualties. Firefighters and police arrived at the scene, then around 1:50 AM, a second drone hit the ground near the sanatorium, injuring two firefighters, a police officer, and a 19-year-old man. Later, a third drone hit a residential building nearby with no casualties.	4 injured	Shahed-131/136
19	4 April 2024	Kharkiv	Around 1:00 AM, two drones struck a residential area with a short interval, injuring a civilian. Half an hour later, a third drone hit the area where the firefighters who had arrived at the site had parked their vehicles. Three firefighters and a police officer later died in hospital. In addition, a firefighter, a nurse, and two journalists were injured.	4 dead, 5 injured	Shahed 131/136
20	5 April 2024	Zaporizhzhia	Two missiles struck an engine manufacturer in Zaporizhzhia. Approximately an hour and a half later, two additional missiles hit the same location with a one-minute interval between them. Two journalists, who were documenting the aftermath of the initial attack, were wounded in the second strike.	4 dead, 19 injured	Missiles (type unidentified)

21	10 April 2024	Chornomorsk, Odesa Oblast	Around 6:19 PM, a 9M723 missile struck a railway bridge and a petrol station in Chornomorsk. A subsequent strike came 11 minutes later. Six people died in total, among them a combat medic who died in the second strike while providing first aid to injured civilians.	6 dead, 16 injured	9M723
22	25 April 2024	Antonivka, Kherson Oblast	A Russian drone attacked a residential area in Antonivka, near Kherson. When firefighters arrived on the scene, a second drone struck the area. As a result, a firefighter and a local resident were injured, while a firefighting vehicle was also damaged.	2 injured	Drone (type unidentified)
23	3 May 2024	Chuhuiv, Kharkiv Oblast	Two rockets carrying cluster warheads hit the area near the railway station in Chuhuiv around 11:37 AM, injuring three people. Fifty minutes later, two missiles launched from an S-300 system hit the same area with no casualties.	3 injured	5V55 / 48N6
24	19 May 2024	Cherkaska Lozova, Kharkiv Oblast	At 11:03 AM, a missile hit the territory of a recreation centre, killing five civilians and injuring at least five others. A second missile struck at 11:21 AM, approximately 40 metres from the location of the first strike. Four people were killed and the number of injured increased to 26. Among the injured were a policeman and a health worker who provided assistance to the wounded after the first strike.	9 dead, 26 injured	9M723
25	24 June 2024	Druzhkivka, Donetsk Oblast	Around 11:45 AM and 12:15 PM, two 9M723 missiles struck the area of the water pumping station in Druzhkivka. Three civilians were injured.	3 injured	9M723
26	24 June 2024	Pokrovsk, Donetsk Oblast	At 11:58 AM, a 9M723 missile struck a residential area, resulting in fatalities and injuries among local residents. When police arrived at the scene, a subsequent missile hit a railway	5 dead, 48 injured	9M723

			infrastructure building several dozen metres from the site of the initial strike. The second attack resulted in more injured people, including three police officers who were responding to the first strike.		
27	26 June 2024	Kherson	A Russian drone attacked firefighters who were extinguishing a fire in garages following a previous Russian attack. Two firefighters were injured in the incident.	2 injured	Drone-dropped munitions
28	29 June 2024	Vilniansk, Zaporizhzhia Oblast	Two 9M723 missiles hit the railway station in the city of Vilnyansk between 5:39 and 5:51 PM. Eight people were killed and 38 were injured.	8 dead, 38 injured	9M723
29	2 July 2024	Kherson	Overnight, Russian artillery shelled the centre of Kherson, damaging residential buildings, educational institutions, and a hospital. When firefighters arrived at the scene of the attack, Russian forces shelled the area again.	No casualties	Rocket artillery
30	6 July 2024	Nikopol, Dnipropetrovsk Oblast	On the evening of 6 July, the Russian Army carried out an attack on Nikopol, which resulted in a fire breaking out in a residential building. Upon their arrival at the scene of the fire, firefighters were subjected to a follow-up strike. No injuries were reported among the firefighting personnel. However, the attack caused damage to two fire engines.	No casualties	Unidentified
31	11 July 2024	Kherson	Russian troops shelled Kherson with a tank, damaging residential buildings. Police officers, firefighters, and municipal service workers arrived at the scene. Then Russian drones dropped explosives on the first responders. Two police officers, a firefighter, a press service worker from the local administration, and a civilian were injured. A fire engine was also damaged.	5 injured	Drone-dropped munitions

32	11 July 2024	Stanislav, Kherson Oblast	Overnight, Russian artillery shelled a farm in the village of Stanislav. The grain warehouses caught fire and firefighters spent several hours extinguishing the flames. During this time, an FPV drone attacked them. As a result of the strike, a fire engine was significantly damaged.	No casualties	FPV drone
33	13 July 2024	Budy, Kharkiv Oblast	At approximately 3:40 PM, a missile targeted military equipment on flatcars located at a railway station. A video of the attack was subsequently published on Russian Telegram channels, indicating realtime guidance of missiles and showing firefighters arriving at the scene of the attack. Half an hour later, another missile hit the same location, killing the head of the local department of the SES and a police officer. In addition, at least 25 people were injured.	2 dead, 25 injured	9M723
34	24 July 2024	Kharkiv	Around 12:00 PM, two 9M723 ballistic missiles hit the Kharkiv Armoured Plant. Approximately an hour later, another ballistic missile carrying a cluster warhead hit the plant and the grounds around it. Initial reports indicate that no first responders were killed or injured in these attacks, as they had either evacuated the premises or sought shelter in advance. However, the attacks did result in several injuries to civilians who were in the vicinity, with injuries attributed to shrapnel from the explosions.	6 injured	9M723
35	14 August 2024	Stanislav, Kherson Oblast	Around 5:00 PM, Russian forces attacked the village of Stanislav. While firefighters were dealing with the aftermath of the attack, a drone attacked them. Four rescuers sustained injuries. In addition, a fire engine was damaged.	4 injured	Drone-dropped munitions

36

16 August
2024

Antonivka,
Kherson Oblast

Russian forces attacked a school in the village of Antonivka, injuring one woman. When firefighters arrived to extinguish the fire, they were caught by a second attack. A fire engine was damaged.

1 injured

Unidentified



* A fire engine damaged in a drone attack in Khmelnytskyi.
Source: State Emergency Service of Ukraine

Double-tap strikes have emerged as a brutal tactic in modern warfare, particularly in Russia's ongoing full-scale war on Ukraine. An initial strike is followed by a secondary strike usually aimed at first responders and civilians, amplifying the chaos caused by the first strike and multiplying the suffering on the ground.

This report aims to explore the pattern and implications of Russian double-tap strikes in Ukraine as well as to provide a legal assessment of these actions and analyse this phenomenon from the perspective of international law as a whole.