The human toll and humanitarian crisis of the Russia-Ukraine war: the first 162 days

Uubydul Haque,1 Amna Naeem,2 Shanshan Wang,1 Juan Espinoza,3 Irina Holovanova,4 Taras Gutur,5 Dmitry Bazyya,6 Rebeca Galindo,1 Sadikshya Sharma,1 Igor P Kaidaive,4 Dmytro Chumachenko,8 Svyatoslav Linnikov,9 Esther Annan,1 Jailos Lubinda,10 Natalya Korol,6 Kostyantyn Bazyya,8 Lilia Zhyvotovska,11 Andriy Zimenkovsky,5 Uyen-Sa D T Nguyen,1

ABSTRACT

Background We examined the human toll and subsequent humanitarian crisis resulting from the Russian invasion of Ukraine, which began on 24 February 2022.

Method We extracted and analysed data resulting from Russian military attacks on Ukrainians between 24 February and 4 August 2022. The data tracked direct deaths and injuries, damage to healthcare infrastructure and the impact on health, the destruction of residences, infrastructure, communication systems, and utility services – all of which disrupted the lives of Ukrainians.

Results As of 4 August 2022, 5,552 civilians were killed outright and 8513 injured in Ukraine as a result of Russian attacks. Local officials estimate as many as 24,328 people were also killed in mass atrocities, with Mariupol being the largest (n=22,000) such example. Aside from wide swathes of homes, schools, roads, and bridges destroyed, hospitals and health facilities from 21 cities across Ukraine came under attack. The disruption to water, gas, electricity, and internet services also extended to affect supplies of medications and other supplies owing to destroyed facilities or production that ceased due to the war. The data also show that Ukraine saw an increase in cases of HIV/AIDS, tuberculosis, and Coronavirus (COVID-19).

Conclusions The 2022 Russia-Ukraine War not only resulted in deaths and injuries but also impacted the lives and safety of Ukrainians through destruction of healthcare facilities and disrupted delivery of healthcare and supplies. The war is an ongoing humanitarian crisis given the continuing destruction of infrastructure and services that directly impact the well-being of human lives. The devastation, trauma and human cost of war will impact generations of Ukrainians to come.

WHAT IS ALREADY KNOWN ON THIS TOPIC?

- The Russian attack on Ukraine has caused the biggest war in Europe since the Second World War, which triggered several crises such as a massive exodus of citizens from their homes, massive deportations of people from the occupied territories, and military violence with massive executions of citizens.
- There is little information about the in-depth impact of the Russia-Ukraine war on healthcare and the humanitarian crisis, including destruction of infrastructure and services that impact the well-being of Ukrainians daily.

WHAT THIS STUDY ADDS?

- This is a first attempt to document civilian casualties by weapon type and damage to healthcare infrastructure, alongside the greater toll of destruction of civilian infrastructure and utilities.
- This study considers the destroyed Health Service delivery and the growing humanitarian crisis due to destructions of residences, infrastructures, communications, and utilities that affect the health and well-being of human lives in Ukraine.

HOW THIS STUDY MIGHT AFFECT RESEARCH, PRACTICE OR POLICY?

- This study informs public health preparedness on potential healthcare infrastructure that has been severely impacted by the war, further suggesting ways to prioritise healthcare delivery.
- Future research on the impact of the Russia-Ukraine war on the mental health of Ukrainians is needed.

INTRODUCTION

The full-scale Russian invasion of Ukraine started on 24 February 2022. Before the war, Ukraine had a population of 41.6 million.1 As of 4 August 2022, 7.1 million people remain displaced – forced to flee from their own homes by the war within Ukraine and 10.3 million refugee movements have been recorded out of Ukraine.2,3 Ukraine’s healthcare system was already facing difficulties such as under-funded healthcare and inequities in the distribution of resources and hospital location before the war began.4
Since its 2014 healthcare reform, Ukraine has seen a steady decline in infant mortality. Nonetheless, this rate in Ukraine was still 1.85 times higher than the European Union average rate in 2019 (7.2 deaths per 1000 live births in Ukraine vs 3.9 deaths per 1000 live births in the European Union). Another healthcare sector that has drastically changed over the years is the pharmaceutical industry. The Ukraine has increased its production of medicines over time – moving from having a few pharmaceutical plants during the collapse of the Soviet Union in 1991 to establishing a relatively strong pharmaceutical production sector. However, any gains over the years related to healthcare improvement and/or pharmaceutical production will likely be reversed given the current war in Ukraine.

Communicable diseases were also a major health concern in Ukraine even before the current Russian invasion. Ukraine has the fourth-highest tuberculosis (TB) rate in Europe, with 30,000 people diagnosed with TB each year. Drug-resistant TB accounted for 29% of all new diagnoses, and only 81% of the total TB cases were diagnosed and treated. In addition to TB, it is estimated that about 152,000 of 260,000 people living with HIV in Ukraine receive antiretroviral therapy. Challenges in diagnosing and treating various communicable diseases in Ukraine were compounded by the country’s limited medical supplies. Given the current Russian invasion of Ukraine, the WHO’s (WHO) Health Emergencies programme cautions that a new COVID-19 variant could gravely impact the already vulnerable refugee population and the millions of displaced people. The surrounding nations absorbing an influx of refugees are also likely to experience a surge in COVID-19 cases, resulting in possible increases in hospitalisations and deaths from COVID-19.

Another area of concern is the impact of the war on the well-being of Ukrainian children. Beyond the immediate threats to life, the war in Ukraine has led to at-risk children with chronic conditions experiencing treatment disruption. According to the International Diabetes Federation Atlas, around 6700 children and adolescents were diagnosed with Type 1 diabetes in Ukraine in 2021. The scarce access to essential health resources for these children during military conflicts is worrisome.

Aside from the bombardment of hospitals and dispensaries that impact the deliveries of healthcare and health services, shelling and bombing in areas with active hostilities also destroyed homes, schools, bridges, and nuclear power plants. Due to the blockade of cities by Russian troops, wounded civilians, including mothers and newborns were unable to receive appropriate medical care. Taken together, the Russian invasion not only impacts lives and safety, but the health and well-being of all Ukrainians due to the impact of the invasion on access to clean water, gas and electricity, as well as the internet and other forms of communication. In essence, the Russian invasion has resulted in a humanitarian crisis for Ukrainians.

The war has damaged an already fragile healthcare system, caused ongoing civilian casualties, and it has involved direct attacks on healthcare facilities and residential areas. Yet, not much is known about the extent of the human and societal costs since the start of the 2022 Russian invasion of Ukraine. Thus, the purpose of this study was to determine the human toll including overall civilian casualties and injuries from attacks, casualties by different types of attack weapons, attacks on healthcare facilities – including children’s hospitals and maternity wards, and the impact on health and spread of diseases. We also consider the humanitarian crisis brought on by destruction of residential areas, civilian infrastructure, communication systems, and disruptions to utility services.

METHODS

Data collection

We first extracted data from online and printed news published in English (live update) and Ukrainian languages. These sources included but were not limited to Al Jazeera, the BBC, CNN, Fox News, Voice of America, the Kyiv Independent, Ukrainian local newspapers, The Guardian, Reuters, Forbes, UNICEF, and the UN. The news contained data on all primary, secondary, and tertiary healthcare facilities, along with attacks on ambulances, and pharmacies, direct civilian deaths, and injuries from attacks. The data included violent deaths directly from a missile attack on hospitals, and other civilian infrastructure such as residential buildings, dams, bridges, churches, schools, television tower, theatre, and power plants. In addition, the news contained data on the impact of human rights violations including atrocities committed by the Russian military and missing or unaccounted for civilians, and the destruction of actual physical infrastructure and disruption to utility and communication services. The attacks on Ukrainian forces that did not result in civilian casualties are not counted in this dataset. To avoid duplicating data from the many mass media sources that were included in our analysis, we created a database to keep track of hospital destruction, physical infrastructural damage which destroy a facility or building, shelling, and all lethal events. Complete information on locations, dates, events, and fatalities or injuries were recorded. The approximate number of people killed in occupied and ruined cities was collected from the Ukraine Ministry of Health. Additionally, we compiled data on the number of attacks on health facilities – including children’s hospitals and maternity wards, nuclear plants, residential buildings, churches, schools, dams, bridges, and food supply (i.e. running out of reserves in all large grocery stores). Data were also vetted by checking with numbers released by local Ukrainian media outlets, the Ministry of Defence, and the Ministry of Health. We also collected data from the Ukrainian Ministry of Health to describe communicable diseases impacted by the war.
that had not been reported in English language sources. The injuries and fatalities data were also cross-checked with the UN sources. We used data from 24 February to 4 August 2022. We have summed each day’s events (deaths and injuries with different attacks in different cities and villages in Ukraine). More details about the references are in the online supplemental file 1 (supplementary texts).

Data cleaning
During data cleaning, we cross-checked each event with multiple sources for accuracy and removed duplicate records. These sources included the Surveillance System for Attacks on Healthcare (SSA)/WHO, Office of the United Nations High Commissioner for Human Rights, online and printed news published in English and Ukrainian languages, and the Ukrainian Ministries of Health and Defence. If an inconsistency was noted, our collaborators in Ukraine would check with the Ukraine Ministry of Health, and the Ministry of Defence by phone call or email to ensure data quality. Data variables per event included the date, the name of the city, and the number of fatalities and/or injuries. We also combined fatalities and injuries that were reported on a particular date for civilians and from medical facilities. These fatalities and injuries were reported by date. We categorised weapon types used as aerial bombing, artillery, shelling, mining, Multiple Launch Rocket Systems (MLRS) and missile. We have summed each day’s events (deaths and injuries with different attacks in different cities and villages in Ukraine). After finalising the data set, the data were checked for possible null values, duplicates, and errors.

Data analysis
We performed exploratory analyses of all the data collected, including 250 event-based attacks using descriptive statistics. Areas of focus included: (1) new and cumulative civilian fatalities and injuries; (2) casualties by weapon type; (3) casualties associated with hospital and residence attacks, including mass atrocities and missing or unaccounted civilians; (4) the destruction and disruption of hospitals and other elements of healthcare infrastructure, including children’s hospitals and maternity wards; (5) description of outbreaks of key communicable diseases; and (6) the destruction of non-healthcare-related civilian structures and disruption to utilities and communication services. The analysis was performed using Excel (Microsoft, Redmond, Washington) and Anaconda Python 3.0 (Anaconda Inc., Austin, Texas). Visualisation was developed using Excel and Keynote (Apple, Cupertino, California). All dates in the figures are presented in ISO 8601 format (YYYY.MM.DD) to reduce confusion for an international audience. Our analysis is a compilation of data on deaths, injuries and factors that directly or indirectly impact the health and well-being of Ukrainians as a result of the war with Russia.

RESULTS
Fatalities and injuries
The results presented in this current research study are based on the sources of data that were available to our research team as of 4 August 2022, after 162 days of Russian military attacks. There were 5552 civilians directly killed and 8513 were injured in Ukraine (figure 1). A total of 2383 deaths were extracted from a single source, 1787 deaths were extracted from two sources, 743 deaths

![Figure 1](http://gh.bmj.com/) New and cumulative civilian fatalities and injuries, 24 February to 4 August 2022. New civilian fatalities and injuries are represented by lines using a logarithmic Y-axis on the left. Cumulative civilian fatalities are shown as the area under the line using a linear Y-axis on the right. Time is represented on the X-axis in 17-day increments.
were extracted from three sources, and 639 deaths were extracted from four sources. Among them, 18 medical workers died as a result of rocket attacks and shelling, and more than 50 were injured. Most of the civilians killed were from Cherkasy, Chernihiv, Kharkiv, Kherson, Kyiv, Mariupol, Mykolayiv, Odesa, Sumy, Zaporizhzhia, Dnipro, and Zhytomyr. The highest, single-day number of civilian fatalities (162) was reported on 27 February (figure 1).

Shelling was the most common weapon type documented, used in 145 out of 162 days of hostilities (figure 2). Attacks that involved shelling were the deadliest, resulting in 4,966 fatalities, or nearly 90% of all deaths. Hospitals were attacked on 78 out of 162 days, and residences were attacked every day (figure 3). There was 1 day, 5 March, during which all casualties from residential attacks were deaths. Attacks on residences resulted in more total fatalities and injuries than attacks on hospitals. In addition, attacks on residences had a slightly higher proportion of fatalities relative to casualties compared with attacks on hospitals, 39.5% vs 34.3%. Finally, using low estimates from the Ukrainian Ministry of Health, approximately 243,280 people were killed by mass atrocities or were unaccounted for in Bucha, Irpin, Kharkiv, Kreminka, Mariupol, Popasna, and Trostianets. This was overwhelmingly so in Mariupol (figure 4).

**Healthcare infrastructure and disruption to delivery of healthcare and health services**

In addition to the civilian casualties, we identified 32 major hospitals in Ukrainian cities that were attacked during the study period (figure 5). These included a maternity hospital, a Red Cross healthcare facility, a cancer hospital, and multi-disciplinary hospitals in Mariupol. All these confirmed attacks on hospitals and healthcare facilities are reported as direct Russian attacks. We reviewed the SSA/WHO’s report and identified 445 attacks on healthcare facilities, with 374 attacks that impacted healthcare facilities and included 109 attacks that impacted supplies (figure 6). All different types of health facilities such as primary, secondary, tertiary care, and other facilities were also attacked (table 1).

Concerning disruption in deliveries of healthcare and health services, pharmacy data shows that the total number of working pharmacies in Ukraine dropped by 19% (n=3,695) between 23 February and 4 June 2022 (figure 7). The most critical humanitarian situation was in Mariupol (not shown in figure 8), which had no pharmacy and no access to essential medicines, as of 4 June 2022. Only 13% of pharmacies were operating and dispensing medicines in Chernihiv and 35% of pharmacies were operating in Kharkiv. However, the number of pharmacies
operating in Kyiv increased; as of 4 June, 62% of pharmacies were operating.

During wartime, infectious disease outbreaks are more likely to occur,25–28 possibly from delayed or interrupted vaccinations or disruption to clean sources of water, as well as crowded quarters. Botulism outbreak was reported, 23 people were infected and two people died.29 30 The polio vaccination campaign was stopped31 and 950434 patients were diagnosed with COVID-19 during the war resulting in 8402 deaths in Ukraine.32 33 Meanwhile, 6837 people were also diagnosed with tuberculosis, and 3393 with HIV/AIDS.32

**Figure 3** Civilian casualties associated with attacks on hospitals and residences by Russian forces, 24 February to 4 August 2022. The bars at the top of the figure represent the total number of days with attacks on hospitals vs residences. The tabular data below list the number of days with fatalities, injuries, casualties, and the total numbers of each.

| Days with fatalities | Days with injuries | Days with casualties | Total fatalities | Total injuries | Total casualties | Casualties per day | Fatality proportion of casualties |
|----------------------|-------------------|---------------------|-----------------|---------------|-----------------|-------------------|----------------------------------|
| 162                  | 161               | 162                 | 5540            | 8490          | 14030           | 86.6              | 39.5%                            |
|                      |                   |                     | 12              | 23            | 35              | 0.45              | 34.3%                            |

**Attacks on civilian Infrastructure and disruption to utilities and communication services**

In addition to casualties of war and disruption to delivery of healthcare and health-related services, there were at least 250 attacks on non-healthcare civilian

**Figure 4** People were killed by mass atrocities or unaccounted for across eight cities in Ukraine. Time is represented along the X-axis. The area of each circle is proportional to the number of people killed or not traceable.
Haque U, et al. BMJ Global Health 2022;7:e009550. doi:10.1136/bmjgh-2022-009550

Types of Infrastructure Attacked or Disrupted:

- Civilian and Residential
- Utility Services
- Communication Systems
- Additional Health Infrastructure

**Figure 5** Attacks and disruption to key civilian and healthcare infrastructure across Ukraine, 24 February to August 5, 2022. Figure 5A shows a map of Ukraine with 21 cities labelled that experienced major attacks or disruptions. The legend at the bottom of the figure shows the icons representing civilian and residential infrastructure, communication systems, utility services, and additional health infrastructure (e.g. medical supplies). The letters on the map in Figure 5A correspond to the cities listed in Figure 5B. Individual hospitals attacked and the type of damage they experienced is detailed in Figure 5B.

**Figure 6** Infographic summarising the data for Ukraine in the WHO’s surveillance system for attacks on Healthcare, 24 February to August 5, 2022.

Table 1: Total number of facilities attacked

| Facility type                  | Total attacks | Attack (%) | Total injured | Total death |
|-------------------------------|---------------|------------|---------------|-------------|
| Primary & preventive care     | 123           | 32.71%     | 3             | 2           |
| Secondary care                | 152           | 40.43%     | 49            | 12          |
| Tertiary care                 | 18            | 4.79%      | 3             | 1           |
| Mobile clinic                 | 1             | 0.27%      | 0             | 1           |
| Pharmacy                      | 9             | 2.39%      | 0             | 0           |
| Warehouse                     | 7             | 1.86%      | 0             | 2           |
| Others*                       | 66            | 17.55%     | 17            | 63          |
| **Total**                     | **376**       | **100%**   | **72**        | **81**      |

*Ambulance, Centre for Emergency Care, Nursing homes, Rehabilitation centres, Blood transfusion, Bureau of Forensic Medical Examination, and Disaster Medicine.

infrastructure that impacted the safety and well-being of Ukrainians and compounded the humanitarian crisis in Ukraine (figure 8). We recorded attacks in 82 different cities, villages, and municipalities; targets ranged from museums (n=9) and playgrounds (n=2) to bridges (n=13) and airports (n=3). There were also five attacks on nuclear plants: three attacks in Zaporizhzhia, and two in Chornobyl. An additional small-scale research reactor in Kharkiv also came under attack. Attacks on ammonia warehouses and the use of phosphorous bombs were also reported. Four attacks on food supply reserves were observed at Mariupol, Kherson, and Chernihiv. There
**Figure 7** Change in the number of working pharmacies in Ukraine between 23 February and 4 June 2022. Data available for 22 oblasts shown. The first vertical bar represents 19,546 pharmacies in the 22 oblasts the start of the invasion, and the vertical bar on the right represents 15,851 pharmacies as of 5 August 2022 (the end date of our data collection).

**Figure 8** Attacks on non-healthcare civilian infrastructure by Russian forces, 24 February to 4 August 2022. The chart plots the total number of attacks on civilian infrastructure documented per week. In the background, an image typical of the destruction caused by Russian forces is visible.
was disruption to the electricity supply in 15 cities; and to the water supply in 8 cities.

Most Ukrainian cities that came under Russian military attacks experienced multiple challenges from damage to civilian infrastructure that resulted in disruption to utility services such as gas and electricity, as well as communication services. The map in figure 5 shows the location of at least 21 cities that experienced significant disruption to utility and communication services.

**DISCUSSION**

There has been a continuous increase in civilian fatalities and injuries since the Russian invasion of Ukraine on 24 February 2022. The Russian army’s occupation of certain territories however, prevented appropriate registration of all deaths and injuries as some remains were left unclaimed in the streets. In addition, the killing of Ukrainian civilians or kidnappings by Russian troops additionally violated human rights and contributed to the trauma of war. The impact of this trauma will affect future generations of Ukrainians.

Our data showed that, shelling was the most common and major cause of death and injury. In addition, the indiscriminate use of explosive weapons in residential areas was responsible for the largest proportion of civilian casualties and the destruction of critical civilian and healthcare infrastructure. The myriad of healthcare consequences and the aftermath of the war are expected to take an even greater toll on Ukrainians. With healthcare facilities being the most attacked infrastructure during the war, coupled with destruction of civilian infrastructure that impact the safety and well-being of Ukrainians, this stands to cripple Ukraine’s healthcare reform and compound the humanitarian crisis in Ukraine.

A targeted attack on a children’s and maternity hospital in Mariupol prompted international outrage. Many international organisations have called these attacks war crimes that are in direct violation of the Geneva Conventions of 1949, which prohibit targeting residential areas and healthcare facilities. Our findings indicate continuous targeting of health facilities and residences over the 162 days included in this study. Both the constant attacks on residential areas and the high proportion of attacks on healthcare facilities are highly unlikely to be random and are consistent with a pattern of intentional targeting.

Moreover, patients and people who were injured or suffering from chronic diseases have limited access to medical care and medications during the current conflict. For example, people living with HIV and tuberculosis have not been able to receive the drugs they need promptly. Because of bombardment of hospitals, factories, and dispensaries, the distribution system needed for the timely delivery of medications and needed drugs was disrupted. Due to destroyed roads, constant shelling, and threats, many pharmaceutical companies have faced the daunting challenges of little or no access to raw materials and difficulty in delivery of pharmaceutical products.

Also, production is significantly reduced due to frequent air alarms and the lack of safety for employees. In places where there are active hostilities and shelling, some pharmacies have closed due to safety concerns and this has restricted access to pharmacy workers (figure 8). Thus, critical supplies, including oxygen, insulin, and cancer treatments are in short supply. Moreover, storage facilities for pharmaceuticals located near Kyiv were destroyed by a rocket strike and had damage costing up to 1.5 billion hryvnias (approximately 50 million US dollars). Disruption of these pharmaceutical and pharmacy services due to the current Russian invasion may result in shortages of medicines and supplies, which may further result in life-threatening complications for children and adults.

Certain areas of Ukraine may be even more impacted by these shortages in medicines due to an overwhelming displacement of 7.1 million people within Ukraine. The occurrence of infectious diseases is expected to worsen owing to destroyed healthcare facilities, lack of or delayed treatment as a result of the war, displacement of people into shelters, and overcrowded spaces with limited or no access to water and sanitation facilities. Further, the campaign to vaccinate against COVID-19 was halted during the Russian invasion. The availability of hospital beds for COVID-19 patients decreased and the 7-day average number of polymerase chain reaction (PCR) tests increased significantly as a direct result of war. However, the data on the case-fatality rate from COVID-19 in Ukraine (3.24%) may be an overestimation. This is due to the possibility of lower occurrence testing given the ongoing war or possibly under-reporting of cases by media or government sources. Nations surrounding Ukraine that experienced an influx of refugees will also be likely to experience a surge in COVID-19 cases, resulting in possible increases in hospitalisations and deaths from COVID-19. Other infectious diseases, including the pre-existing high level of mortality and disability from tuberculosis and drug-resistant tuberculosis in Ukraine, are expected to worsen because of the war.

Beyond the reported number of physical injuries and deaths from war, and disruption in delivery of healthcare and health services, there may be an additional health burden as a result of the 2022 Russia-Ukraine War. While we have no data to present on issues related to mental health, past war experiences included post-traumatic stress disorders, which affect veterans and civilians. Even before the war, few Ukrainians had access to mental health services. The war will likely exacerbate the mental healthcare needs of both young and old Ukrainians.

Ecological and environmental destabilisation also leaves behind unintended lasting impacts. Fires at oil depots and/or nuclear sites, and ammonia leaks at industrial sites (Sumy region) can lead to exposure sites retaining toxic chemicals and radiation, as well as air pollution. Such exposures can pose a threat to long-term respiratory and other chronic diseases. Also, Russian troops occupied the Chornobyl nuclear power plant...
plant, dug trenches in the most contaminated part of the Chornobyl exclusion zone, used “significant doses” of radiation, and contaminated the vast areas they travelled. Another source of radiation pollution may be the Zaporizhzhia nuclear power plant, which is the largest in Europe. The plant was shelled by Russian tanks on 4 March; the condition of its five power units remains unknown.

As a result of shelling and bombing in areas with active hostilities, vital infrastructure was destroyed that could impact the safety and well-being of Ukrainians. Disruptions in utilities such as electricity, gas, and water, as well as communication services will have a major impact on the quality of life and well-being of Ukrainians. Nearly 30% of Ukrainian physical infrastructure may have been damaged or destroyed during the timeframe used for our study. As of 1 August 2022, nearly 123,000 houses were destroyed by Russian attacks.

The strengths and limitations of this study warrant discussion. It is possible that news outlets reported fewer cases or lost track of the actual number of cases during the war. Furthermore, our study was descriptive, as the data presented in the figures do not fully reflect the full human cost of war in Ukraine. The data on mortality and injury did not come solely from government surveillance. While government surveillance data may be more comprehensive and standardised in times of peace, such data may not likely be accurate in times of war, particularly if the national defence is at stake. The data are likely an underestimation given that we may not have 100% coverage of the entire Ukraine population during the war. One component of this study provides data on deaths and injuries from direct attacks. The aggregate number of people reportedly injured compared with people reportedly killed in this study suggested either high lethality or significant under-reporting of injuries, which is a possibility. Also, this study provides data on more obvious types of attacks, for example, missile attacks, and attacks resulting in violent deaths that are more likely to be reported or covered by the media. Previous reporting by Hagopian for example, found that shootings were the most common type of killing event, which is different from our findings and others. In addition, our study would not be able to represent violent deaths directly from executions, beatings, or rape by military forces, because these are less likely to be quantified, reported, or recorded. This is likely the result of incomplete newspaper or media reporting. We do not have further details regarding the Ukrainian government’s method(s) of data surveillance. Lastly, the exact number of injured and dead may never be fully known given unmarked mass graves. However, our data are timely, and from multiple reliable sources verified by Ukrainian newspapers and collaborators.

CONCLUSION

In conclusion, the impact of the recent Russian invasion of Ukraine has caused massive injuries and deaths, destroyed infrastructure and healthcare systems, and prevented timely production and delivery of pharmaceuticals and medical supplies. In addition, the bombing and shelling of healthcare facilities and residential homes, the killings, and countless civilians unaccounted for, are immense human rights violations. This war will have a long-term impact on the physical and mental health of generations of Ukrainians. Ukraine’s infrastructure, health, utility and other essential systems must be rebuilt to ensure appropriate recovery for the country and its people. Continued surveillance and support is imperative to help mediate the long-term effects of the war and to rebuild Ukraine.

Author affiliations
1Department of Biostatistics and Epidemiology, University of North Texas Health Science Center, Fort Worth, TX, USA
2Department of Statistics, Quaid-i-Azam University, Islamabad, Pakistan
3Children’s Hospital Los Angeles, Los Angeles, CA, USA
4Poltava State Medical University, Poltava, Ukraine
5Danylo Halutsky Lviv National Medical University, Lviv, Ukraine
6National Research Centre for Radiation Medicine, Kyiv, Ukraine
7School of Health Professions, University of Southern Mississippi, Hattiesburg, MA, USA
8Department of mathematical modeling and artificial intelligence, National Aerospace University, Kharkiv, Ukraine
9Department of health promotion, Odesa Regional Center for Public Health, Odesa, Ukraine
10The Telethon Kids Institute, Nedlands, Perth, Australia
11Department of Psychiatry, Narcology and Medical Psychology, Poltava State Medical University, Poltava, Ukraine

Twitter Ubydul Haque @ubydul and Juan Espinoza @juanespinozamd

Acknowledgements The authors thank Dr. Kostyantyn Dumchev for his contributions to the literature review. There was no funding for this study.

Contributors: UH conceptualised the study. UH, AN, and U-SDTN contributed to the methodology design. UH, AN, SW, HG, DG, RG, SS, ID, NK, KB, and LZ curated the data. AN, JE, and UH conducted the formal analysis. UH and U-SDTN wrote the first draft of the manuscript with inputs from IH, TG, DB, IPK, SL, EA, JL, and DC. All authors had access to data, which were verified by Ukrainian authors. All authors reviewed and approved the manuscript for submission. The first author (UH) is the guarantor who had access to all the data, and accepts responsibility for the work, the conduct of the study and the decision to publish.

Funding The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Map disclaimer The inclusion of any map (including the depiction of any boundaries therein), or of any geographic or locational reference, does not imply the expression of any opinion whatsoever on the part of BMJ concerning the legal status of any country, territory, jurisdiction or area or of its authorities. Any such expression remains solely that of the relevant source and is not endorsed by BMJ. Maps are provided without any warranty of any kind, either express or implied.

Competing interests None declared.

Patient and public involvement Patients and/or the public were not involved in the design, conduct, or reporting, or dissemination plans of this research.

Patient consent for publication Not applicable.

Ethics approval Not applicable.

Provenance and peer review Not commissioned; externally peer reviewed.

Data availability statement Data are available upon reasonable request.

Supplemental material This content has been supplied by the author(s). It has not been vetted by BMJ Publishing Group Limited (BMJ) and may not have been
peer-reviewed. Any opinions or recommendations discussed are solely those of the author(s) and are not endorsed by BMJ. BMJ disclaims all liability and responsibility arising from any reliance placed on the content. Where the content includes any translated material, BMJ does not warrant the accuracy and reliability of the translations (including but not limited to local regulations, clinical guidelines, terminology, drug names and drug dosages), and is not responsible for any error and/or omissions arising from translation and adaptation or otherwise.

Open access This is an open access article distributed in accordance with the Creative Commons Attribution Non Commercial (CC BY-NC 4.0) license, which permits others to distribute, remix, adapt, build upon this work non-commercially, and license their derivative works on different terms, provided the original work is properly cited, appropriate credit is given, any changes made indicated, and the use is non-commercial. See: http://creativecommons.org/licenses/by-nc/4.0/.

ORCID iDs
Ubydul Haque http://orcid.org/0000-0002-7413-1017
Shanshan Wang http://orcid.org/0000-0001-8718-1905
Juan Espinoza http://orcid.org/0000-0003-0513-588X
Irina Holovanova http://orcid.org/0000-0002-8114-8319
Taras Gutor http://orcid.org/0000-0002-3754-578X
Liliia Zhyvotovska http://orcid.org/0000-0002-1469-060X
Andriy Zimenkovsky http://orcid.org/0000-0002-9649-293X

REFERENCES
1 State statistics service of Ukraine, 2021. number of present population of Ukraine, 2021. Available: http://ukrstat.gov.ua/druk/publicat/kat_u_2021/zb05/zb_chuselinst%202021.pdf [Accessed 8 April 2022].
2 The UN Refugee Agency (UNHCR). Ukraine situation: Flash Update #15, 2022. Available: https://data.unhcr.org/en/documents/details/93271 [Accessed 28 July 2022].
3 UNHCR. Ukraine situation Flash Update #24. Available: https://data.unhcr.org/en/documents/details/94640 [Accessed 14 Aug 2022].
4 Romaniuk P, Semigina T. Ukrainian health care system and its chances for successful transition from Soviet legacies. Global Health 2018;14:116.
5 Statistika. Ukraine: infant mortality rate from 2009 to 2019, 2022. Available: https://www.statistica.com/statistics/807836/infant-mortality-in-ukraine/#:~:text=Infant%20mortality%20rate%20in%202018%20is%205.5%20per%201000,live%20births [Accessed May 24 2022].
6 World Health Organization (WHO). Highlights on health in Ukraine, 2005. Available: https://www.euro.who.int/__data/assets/pdf_file/0016/1103615/882865.pdf [Accessed 18 April 2022].
7 Eiben H, Hala L, Slipchuk V. The current state of the pharmaceutical market of Ukraine, quality assurance and medication distribution. Farmaciu 2018;68:411–9.
8 The Straits Times. Ukraine's tuberculosis progress 'stopped in one day' after Russia invasion, 2022. Available: https://www.straitstimes.com/world/ukraines-tuberculosis-progress-stopped-in-one-day-after-russia-invasion [Accessed July 30 2022].
9 World Health Organization (WHO). World tuberculosis day: supporting Ukraine in scaling up TB diagnosis and treatment, 2021. Available: https://www.who.int/europe/news/item/23-03-2021-world-tuberculosis-day-supporting-ukraine-in-scaling-up-tb-diagnosis-and-treatment#:~:text=World%20Tuberculosis%20Day%202021%20is%20celebrated%20on%20March%2024,2021%20is%20being%20celebrated%20in%20countries%20around%20the%20world [Accessed 8 April 2022].
10 Roberts L. Surge of HIV, tuberculosis and COVID feared amid war in Ukraine. Nature 2022;593:557–8.
11 World Health Organization (WHO). Treating tuberculosis in Ukraine, 2020. Available: https://www.who.int/news-room/detail/treating-tuberculosis-in-ukraine [Accessed August 2022].
12 The Joint United Nations Programme on HIV/AIDS (UNAIDS). Unaid urges protection and continuity of health and HIV services for people living with and affected by HIV in Ukraine, 2022. Available: https://www.unaids.org/en/resources/presscentre/pressreleaseandstatementarchive/2022/february/20220225_ukraine [Accessed April 8 2022].
13 MARTUSCELLI C, HYDE L. War in Ukraine risks reversing gains in fight against HIV, tuberculosis. Available: https://www.politico.eu/article/ukraine-ukraine-risks-reverse-gains-fight-against-hiv-tuberculosis/ [Accessed 31 March 2022].
14 Morris L, Diamond D. Ukraine conflict could spark surge of covid, polio, other diseases, says expert. Available: https://www.washingtonpost.com/health/2022/03/02/russia-invasion-ukraine-pandemic-health-effects/ [Accessed 31 March 2022].
15 Children: innocent victims of war in Ukraine. Lancet Child Adolesc Health 2022;6:279.
16 International Diabetes Federation (IDF). IDF diabetes Atlas10th EDN, 2021. Available: https://diabetesatlas.org/ [Accessed 3 April 2022].
17 World Health Organization (WHO). Emergency in Ukraine, 2022. Available: https://apps.who.int/iris/bitstream/handle/10665/352696/WHO-EURO-2022-5152-44915-64091-eng.pdf?sequence=1&isAllowed=y [Accessed April 8 2022].
18 IFE Core Group. Ukraine summary of lessons learned and essential documents on Infant and Young Child Feeding in Emergencies (IFY-E), 2022. Available: https://reliefweb.int/sites/reliefweb.int/files/resources/ukraine_lessonse_learned_-_march_2022_final.pdf [Accessed 17 March 2022].
19 NPR. Ukrainian health Minister says Russia is blocking access to medicines. Available: https://www.npr.org/2022/08/13/1173463055/ukrainian-health-minister-russia-blocking-access-medicines [Accessed 16 Aug 2022].
20 UKinform. Maripol death toll stands at 22,000 – mayor’s adviser. Available: https://www.ukinform.net/rubric-atol/3491682-maripol-death-toll-stands-at-22000-mayors-adviser.html [Accessed 16 Aug 2022].
21 Ministry of Health, Ukraine. The Ministry of health reported how many Ukrainian doctors died during the five months of the war. Available: https://www.who.int/countries/ua/en/ [Accessed 16 Aug 2022].
22 Ministry of Health, Ukraine. Vaccination. Available: https://www.who.int/ua/vaccination [Accessed 16 Aug 2022].
23 online Aurora. There are currently more than 16000 pharmacies in Ukraine: current statistics, 2022. Available: https://www.apheka.ua/article/635254
24 Zhdan VM, Holovanova IA, Khorosh MV, et al. Analysis of the legislative activity of the Ministry of health of Ukraine in the conditions of the Russian-Ukrainian war in 2022. Wad Med 2022;75:1245–33.
25 Vasylyeva Ty, Lulichuk M, Friedman SR, et al. Molecular epidemiology reveals the role of war in the spread of HIV in Ukraine. Proc Natl Acad Sci U S A 2018;115:10266.
26 Keebageoan A, Munyamunyanaputo R, Wiwanitkit V. War in Ukraine and the TB epidemic. Int J Tuberc Lung Dis 2022;26:801a–801b.
27 Mbaey C, Moran T, Wadoo Z, et al. Stopping a polio outbreak in the midst of war: lessons from Syria. Vaccine 2021;39:717–23.
28 Public Health Center of the Ministry of Health of Ukraine. Weekly Public Health Highlights report 14 weeks of 2022 (April 4–10). 2022. Available: https://www.phc.org.ua/sites/default/files/users/909__risk_2022_14.pdf [Accessed April 17 2022].
29 Main Department of the State Food and Consumer Service in Rivne region. Botulism, 2022. Available: https://www.rivneprod.gov.ua/2022/06/13/botulism/ [Accessed 22 June 2022].
30 Public Health Center of the Ministry of Health of Ukraine. All-Ukrainian Polymyelite vaccination campaign: results of the third week, 2022. Available: https://phc.org.ua/news/vseukrainskia-kampaniya-scheplennya-profi-polimieliu-rezultati-tretogo-tizhnya [Accessed April 17 2022].
31 Public Health Center of the Ministry of Health of Ukraine. Hv and TV statistics in Ukraine: March 2022, 2022. Available: https://phc.org.ua/news/statistikva-vi-i-t-b-v-ukraini-berezen-2022-roku [Accessed April 17 2022].
32 Ministry of Finance. Coronavirus in Ukraine, 2022. Available: https://index.minfin.com.ua/reference/coronavirus/ukraine/2022-02/ [Accessed April 17 2022].
33 International Committee of The Red Cross (ICRC). The Geneva conventions of 1949 and their additional protocols, 2010. Available: https://www.icrc.org/en/doc/1949-1977/eng.pdf [Accessed April 8 2022].
34 Khan A. Is Russia committing war crimes by bombing hospitals in Ukraine? Available: https://www.ajzeera.com/features/2022/3/10/is-russia-committing-war-crimes-by-bombing-hospitals-in-ukraine [Accessed 31 Mar 2022].
Chumachenko D, Chumachenko T. Ukraine war: the humanitarian crisis in Kharkiv. BMJ 2022;376:o796.

Mind.ua. There will be enough medicine for everyone - the Ministry of Health, 2022. Available: https://mind.ua/news/20236625-likiv-vistachit-usim-moz [Accessed April 8 2022].

Nott E. Ukraine invasion: why I fear for Ukraine’s healthcare workers. BMJ 2022;376:o605.

Interfax-Ukraine. Farmak’s losses due to a fire in a warehouse in the Kyiv region at the beginning of the war amounted to about UAH 1.5 billion, 2022. Available: https://interfax.com.ua/news/pharmacy/816826-amp.html [Accessed April 18 2022].

Alessi J, Yankiv M. War in Ukraine and barriers to diabetes care. Lancet 2022;399:1465–6.

Chumachenko D, Chumachenko T. Impact of war on the dynamics of COVID-19 in Ukraine. BMJ Glob Health 2022;7:e009173.

Kuntz L. Before the Toils of war: mental health in Ukraine, 2022. Available: https://www.psychiatrictimes.com/view/before-the-toils-of-war-mental-health-in-ukraine [Accessed April 1 2022].

BBC. Ukraine war: Russian troops leave Chornobyl, Ukraine says, 2022. Available: https://www.bbc.com/news/world/europe-60945666 [Accessed April 11 2022].

Reuters PP. EXCLUSIVE Russian invasion damaged up to 30% of Ukraine’s infrastructure, says minister, 2022. Available: https://www.reuters.com/world/europe/exclusive-russian-invasion-damaged-up-30-ukraines-infrastructure-says-minister-2022-04-18/ [Accessed May 24 2022].

Sabin L, Atkinson E, Dasgupta S. Independent. Ukraine news – live: Kyiv says 17 giving up land to Russia would backfire, 2022. Available: https://www.independent.co.uk/news/world/europe/ukraine-russia-Lviv-war-latest-putin-kreminna-b2060463.html?page=3 [Accessed April 19 2022].

Bakhmut INUA. How many residential buildings were damaged by the war and how they plan to restore them? Available: https://bakhmut.in.ua/novosti/v-artemovske/3536-skilki-zhitlovikh-budinkiv-postrazhdalo-vid-viini-ta-yak-ikh-planuyut-vidnovlyvati [Accessed 14 aug 2022].

Kytiv School of Economics. The total amount of documented damages is $95.5 billion, minimum recovery needs for destroyed assets — $165.1 billion. Available: https://kse.ua/about-the-school/news/the-total-amout-of-documented-damages-is-95-5-billion-minimum-recovery-needs-for-destroyed-assets-165-1-billion/ [Accessed 14 Aug 2022].

Hagopian A, Flaxman AD, Takaro TK, et al. Mortality in Iraq associated with the 2003-2011 war and occupation: findings from a national cluster sample survey by the University collaborative Iraq mortality study. PLoS Med 2013;10:e1001533.

Hicks MH-R, Dardagan H, Guerrero Srdán G, et al. Violent deaths of Iraqi civilians, 2003-2008: analysis by perpetrator, weapon, time, and location. PLoS Med 2011;8:e1000415.

Hicks MH-R, Dardagan H, Bagnall PM, et al. Casualties in civilians and coalition soldiers from suicide bombings in Iraq, 2003-10: a descriptive study. Lancet 2011;378:906–14.

Strozewski Z. NEWSWEEK. Mariupol forced to bury dead in mass Grave as City remains under siege, 2022. Available: https://www.newsweek.com/mariupol-forced-bury-dead-mass-grave-city-remains-under-siege-1686360 [Accessed Available from:April 18 2022].
References (Supplement)

1. Guha-Sapir D, Schlüter B, Rodriguez-Llanes JM, Lillywhite L, Hicks MH. Patterns of civilian and child deaths due to war-related violence in Syria: a comparative analysis from the Violation Documentation Center dataset, 2011-16. The Lancet Global health 2018; 6(1): e103-e10.

2. Hicks MH, Dardagan H, Guerrero Serdán G, Bagnall PM, Sloboda JA, Spagat M. Violent deaths of Iraqi civilians, 2003-2008: analysis by perpetrator, weapon, time, and location. PLoS medicine 2011; 8(2): e1000415.

3. Hicks MH, Dardagan H, Bagnall PM, Sloboda M, Sloboda JA. Casualties in civilians and coalition soldiers from suicide bombings in Iraq, 2003-10: a descriptive study. Lancet 2011; 378(9794): 906-14.

4. RadioFreeEurope RadioLiberty (RFE/RL). Zelenskiy Says More Than 130 Dead In Russian Invasion And That Ukraine Has Been 'Left Alone' To Fight. 2022. https://www.rferl.org/a/ukraine-deaths-fighting-people-flee/31721630.html (accessed April 18 2022).

5. UN News. Terrified families seek shelter underground in Ukraine capital. 2022. https://news.un.org/en/story/2022/02/1112732 (accessed April 18 2022).

6. reliefweb. Ukraine: Civilian casualties as of 24.00 27 February 2022 [EN/RU/UK]. 2022. https://reliefweb.int/report/ukraine/ukraine-civilian-casualties-2400-27-february-2022-enru (accessed April 18 2022).

7. reliefweb. Ukraine: Civilian casualties as of 24.00 28 February 2022 [EN/RU/UK]. 2022. https://reliefweb.int/report/ukraine/ukraine-civilian-casualties-2400-28-february-2022-enru (accessed April 18 2022).

8. Falconer R, Saric I. AXIOS. At least 352 civilian casualties in Ukraine, Ministry of Interior says. 2022. https://www.axios.com/un-civilians-killed-ukraine-casualties-russia-4efc1dc-f444-4b84-91c4-f9175931b76f.html (accessed April 18 2022).

9. reliefweb. Ukraine Casualty Monitor: AOAV data on harm to civilians by explosive weapons. 2022. https://reliefweb.int/report/ukraine/ukraine-casualty-monitor-aov-data-harm-civilians-explosive-weapons (accessed April 18 2022).

10. Al Jazeera. Many deaths as Russia intensifies bombardment of Ukraine cities. 2022. https://www.aljazeera.com/news/2022/3/2/more-deaths-as-russia-intensifies-bombing-of-ukraine-cities (accessed April 18 2022).

11. reliefweb. Press briefing notes on Ukraine, 11 March 2022. 2022. https://reliefweb.int/report/ukraine/press-briefing-notes-ukraine-11-march-2022 (accessed April 18 2022).

12. Sangal A, Vogt A, Wagner M, et al. CNN. March 11, 2022 Russia-Ukraine news. 2022. https://www.cnn.com/europe/live-news/ukraine-russia-putin-news-03-11-22/h_d1dfb1ec6b9641274af1f5539b193b197 (accessed April 18 2022).

13. BBC. Ukraine war: Three dead as maternity hospital hit by Russian air strike. 2022. https://www.bbc.com/news/world/europe-60675599 (accessed April 18 2022).

14. United Nations (UN). Ukraine: civilian casualty update 12 March 2022. 2022. https://www.ohchr.org/en/news/2022/03/ukraine-civilian-casualty-update-12-march-2022 (accessed April 18 2022).

15. Al Jazeera. Russia strikes Ukraine army base near Poland as it widens attacks. 2022. https://www.aljazeera.com/news/2022/3/13/russia-air-strikes-hit-ukraine-military-base-near-poland (accessed April 18 2022).

16. United Nations (UN). Ukraine: civilian casualty update 25 March 2022. 2022. https://www.ohchr.org/en/news/2022/03/ukraine-civilian-casualty-update-25-march-
2022#:~:text=OHCHR%20notes%20the%20report%20of,been%20killed%20and%20184%20injured. (accessed April 18 2022).
17. World Health Organization (WHO). Surveillance system for attacks on health care (SSA). https://extranet.who.int/ssa/Index.aspx (accessed June 27 2022).
18. Reuters. Ukrainian civilian death toll reaches 1,119, U.N. says. 2022. https://www.reuters.com/world/europe/ukrainian-civilian-death-toll-reaches-1119-un-2022-03-27/ (accessed April 18 2022).
19. United Nations (UN). Ukraine: civilian casualty update 28 March 2022. 2022. https://www.ohchr.org/en/news/2022/03/ukraine-civilian-casualty-update-28-march-2022#:~:text=OHCHR%20notes%20the%20report%20of,been%20killed%20and%20216%20injured. (accessed April 18 2022).
20. United Nations (UN). Ukraine: civilian casualty update 10 April 2022. 2022. https://www.ohchr.org/en/news/2022/04/ukraine-civilian-casualty-update-10-april-2022 (accessed April 18 2022).
21. Ukrinform. Russian army kills 139 children in Ukraine since war-start. Available at: [https://www.ukrinform.net/rubric-ato/3441015-russian-army-kills-139-children-in-ukraine-since-warstart.html], last accessed 03.31.2022. 2022.
22. UN. Ukraine: civilian casualty update. Available at: [https://www.ohchr.org/en/news/2022/03/ukraine-civilian-casualty-update-29-march-2022], last accessed 03.31.2022. 2022.
23. Al Jazeera. Kramatorsk train station attack: Dozens killed, Ukraine says. 2022. https://www.aljazeera.com/news/2022/4/8/kramatorsk-train-station-attack-dozens-killed-ukraine-says (accessed April 18 2022).
24. BBC. Europe's largest nuclear plant shelled in Ukraine. 2022. https://www.bbc.com/news/av/world-60613863 (accessed April 18 2022).
25. Ray S. Forbes. Russian Shelling On Chemical Plant Caused Ammonia Gas Leak, Sumy Governor Says. 2022. https://www.forbes.com/sites/siladityaray/2022/03/21/russian-shelling-on-chemical-plant-caused-ammonia-gas-leak-sumy-governor-says/?sh=29c82e23d425 (accessed April 18 2022).
26. Lister T, Pennington J, McGee L., Gigova R. CNN. 'A family died... in front of my eyes'; Civilians killed as Russian military strike hits evacuation route in Kyiv suburb. 2022. https://www.cnn.com/2022/03/06/europe/ukraine-russia-invasion-sunday-intl-hnk/index.html (accessed April 18 2022).
27. censor.net. The overwhelming forces of the enemy were stopped at the border of the river Teteriv in Kyiv region. The bridge was destroyed to block the way for Russian tanks - Land Forces. PHOTO REPORT. 2022. https://censor.net.ua/news/3319032/perevajayuchiSylyVorogaZupynenoNaRubeji_richky_teteriv_na_kyivivschyni_mist_zruyinovano_schob_perekryty (accessed April 18 2022).
28. BBC. Russian forces seize Chernobyl nuclear power plant. 2022. https://www.bbc.com/news/world-us-canada-60514228 (accessed April 18 2022).
29. Zadorozhnyy P, Kesaieva Y, Tawfeeq M, Federico-O'Murchú S, Renton A, Qiblawi T. CNN. Russia has attacked Lviv. Here's why the western city is so important to Ukraine's defense. 2022. https://edition.cnn.com/2022/03/18/europe/lviv-ukraine-attack-russia-importance-intl/index.html (accessed April 18 2022).
30. Sangal A, Macaya M, Said-Moorhouse L, et al. CNN. April 4, 2022 Russia-Ukraine news. 2022. https://edition.cnn.com/europe/live-news/ukraine-russia-putin-news-04-04-22/index.html (accessed April 18 2022).
31. Hollingsworth J, Berlinger J, Haq SN, et al. CNN. Russia invades Ukraine. 2022. https://edition.cnn.com/europe/live-news/ukraine-russia-putin-news-04-2-22/h_ce7d266e87eefb4d640efbee551051e9 (accessed April 18 2022).

32. BBC. Ukraine nuclear plant: Russia in control after shelling. 2022. https://www.bbc.com/news/world-europe-60613438 (accessed April 18 2022).

33. Stasiuk I. Skyscraper. Russians bomb the Museum of Antiquities in Chernihiv (photo). 2022. https://hmarochos.kiev.ua/2022/03/11/rosiyany-rozbombyly-muzej-starozhytnostej-u-chernigovi-foto/ (accessed April 18 2022).

34. Commissioner for Human Rights of the Verkhovna Rada of Ukraine. Commissioner: aggressor continues to launch missile strikes on Ukraine - civilian airport in Vinnytsia destroyed. 2022. https://ombudsman.gov.ua/news_details/upovnovazheniy-agresor-prodovzhuyu-zavdavati-raketnii-udariv-po-ukrayini-znishcheno-civilnij-aeroport-um-vinnicya (accessed April 18 2022).

35. Commissioner for Human Rights of the Verkhovna Rada of Ukraine. Commissioner: Rashists' actions at Ukraine's nuclear facilities threaten environmental catastrophe for the entire Eastern European region. 2022. https://ombudsman.gov.ua/news_details/upovnovazheniy-diyi-rashistiv-na-yadernih-obyektah-ukrayini-zagrozhuyut-ekologichnoyu-katastrofoyu-vsomushchnovyevropskomu-regionu (accessed April 18 2022).

36. Commissioner for Human Rights of the Verkhovna Rada of Ukraine. Commissioner: Rashist forces continue to kill peaceful Ukrainians with massive rocket attacks and artillery shelling. 2022. https://ombudsman.gov.ua/news_details/upovnovazhenij-masovimi-raketnymi-udarami-ta-artillerijskimi-obstrilami-rashistski-vijska-prodovzhyut-vbivati-mirnih-ukrayinciv (accessed April 18 2022).

37. Prischepa Y. suspilne.media. Japan will hand over chemical protection suits and drones to Ukraine. 2022. https://suspilne.media/230154-aponia-peredast-ukraini-kostumi-himzahistu-i-droni/ (accessed April 18 2022).

38. Office of the Prosecutor General. Air strikes at Dnipro airport - investigation launched. 2022. https://www.gp.gov.ua/ua/posts/aviaudari-po-aeroportu-m-dnipra-roz propelnye-rodoslyavnya (accessed April 18 2022).

39. Office of the Prosecutor General. Capture and hijacking of 5 Ukrainian ships from the seaport of Berdyansk - proceedings have been initiated. 2022. https://www.gp.gov.ua/ua/posts/zaxoplennya-ta-u gon-5-ukrayinskix-korabliv-z-morskogo-portu-berdyanskaja-rozpocato-provadzenny (accessed April 18 2022).

40. March 22: The situation in the transport infrastructure at 20:00. 2022. https://www.kmu.gov.ua/news/22-bereznya-situaciya-v-transportnij-infrastructure-na-2000 (accessed April 18 2022).

41. March 23: The situation in the transport infrastructure as of 12:00. 2022. https://www.kmu.gov.ua/news/23-bereznya-situaciya-v-transportnij-infrastructure-nas-1200 (accessed April 18 2022).

42. UKRAINE OUR HOUSE. Bridge destroyed in Troitsk, houses damaged (PHOTOS). 2022. https://kanal.dom.tv/ukr/troyczku-zrujnovano-mist-posthodzhenavo-zhtovlevybudynky-foto/ (accessed April 18 2022).

43. Museum of Ukrainian Painting. A museum with works by Maria Prymachenko was destroyed in Kyiv. 2022. https://museum.net.ua/news/na-ki%D1%97vshhini-zrujnovano-muzej-z-tvorami-marii%D1%97primachenko (accessed April 18 2022).

44. nv.ua. Zhytomyr is cut off from Kyiv. A bridge on the highway was blown up near the parking lot. 2022. https://nv.ua/ukr/ukraine/events/viyna-rozijji-proti-ukrainskipidirvali-mist-bilya-stoyanki-novini-kiyeva-50220226.html (accessed April 18 2022).
45. nv.ua. The biggest shelter. The occupying aircraft bombed the Drama Theater in Mariupol. 2022. https://nv.ua/ukr/ukraine/events/dramteatr-u-mariupoli-okupants-skiniuli-aviabombi-na-naybilshes-ukrityya-mirnih-zhiteliv-50225646.html (accessed April 18 2022).

46. THE SUNDAY TIMES. Russia accused of using white phosphorus in Ukrainian city. 2022. https://www.thetimes.co.uk/article/president-biden-warns-putin-may-use-cyberattacks-and-chemical-weapons-vj83h6r3w (accessed April 18 2022).

47. Voice of America (VOA). Chernobyl, Zaporizhzhia Nuclear Plants Being Run by Ukrainian Staff, Russia Says. 2022. https://www.voanews.com/a/chernobyl-zaporizhzhia-nuclear-plants-being-run-by-ukrainian-staff-russia-says/6482346.html (accessed April 18 2022).

48. Transatlantic Dialogue Center (TDC). Destroyed cultural heritage. 2022. https://kompkd.rada.gov.ua/uploads/documents/34339.pdf (accessed April 18 2022).

49. Reuters. Ten Ukrainian hospitals destroyed since start of war, minister says. 2022. https://www.reuters.com/world/europe/ten-ukrainian-hospitals-destroyed-since-start-war-minister-says-2022-03-22/ (accessed April 18 2022).

50. Television news service (TCH). Residents of the city of Irpin in Kyiv region are forced to flee from the Russian occupiers through the destroyed bridge: photo. 2022. https://kyiv.tsn.ua/zhiteli-irpeni-na-kiyivschini-tikayut-vid-rosiyskih-okupantiv-cherez-zruynovaniy-mist-foto-1999063.html (accessed April 18 2022).

51. Ukrinform. Russian troops hit nitric acid tank in Rubizhne. 2022. https://www.ukrinform.net/rubric-ato/3449182-russian-troops-hit-nitric-acid-tank-in-rubizhne.html (accessed April 18 2022).

52. Orlova V. UNIAN. There is no more railway connection with the south, the bridge is destroyed - Zaporizhzhya Regional State Administration (photo). 2022. https://www.unian.ua/economics/transport/zaliznichnogo-spoluchennya-z-pivdannya-mist-nikok-kryvyh-zaporizhzhia-oda-foto-novini-ukrajina-11724790.html (accessed April 18 2022).

53. ZAXID.NET. The Russians destroyed the museum with the originals of world-famous artists in Mariupol. 2022. https://zaxid.net/rossiya_zruynovali_muzey_z_originalami_vsesvitno_vdomih_hudozhnikiv_u_mariupoli_n1539309 (accessed April 18 2022).

54. Ministry of Health Ukraine. Viktor Lyashko: Russian troops fired on 135 hospitals, 9 of which were destroyed. 2022. https://moz.gov.ua/article/news/viktor-lyashko-rosijski-vijska-obstriljali-135-likaren-9-z-nih---znischeno-vschent (accessed April 18 2022).

55. Government services online. https://diia.gov.ua/ (accessed April 19 2022).

56. PBS NewsHour. Ukraine investigates claim that phosphorus munitions were dropped in Mariupol. 2022. https://www.pbs.org/newshour/world/ukraine-investigates-claim-that-phosphorus-munitions-were-dropped-in-mariupol (accessed April 18 2022).

57. Interfax-Ukraine. Farmak’s losses due to a fire in a warehouse in the Kyiv region at the beginning of the war amounted to about UAH 1.5 billion. 2022. https://interfax.com.ua/news/pharmacy/816826-amp.html (accessed April 18 2022).

58. Kramer AE, Addario L. The New York Times Company. ‘He Is a Child of War’: Giving Birth Amid Chaos in Ukraine. 2022. https://www.nytimes.com/2022/04/07/world/europe/ukraine-mothers-birth.html (accessed April 18 2022).

59. Deutsche Welle (DW). Ukraine: Women in Kyiv forced to give birth in bomb shelters. 2022. https://www.dw.com/en/ukraine-women-in-kyiv-forced-to-give-birth-in-bomb-shelters/av-61111157 (accessed April 18 2022).
60. O’Grady S, Shefte W, Khudov K. The Washington Post. For these expecting mothers in Kyiv, night is passed in a maternity ward bunker. 2022. https://www.washingtonpost.com/world/2022/03/04/russia-putin-kyiv/ (accessed April 18 2022).

61. Public Health Center of the Ministry of Health of Ukraine. Weekly Public Health Risks Report: 14 Weeks of 2022 (April 4-10). 2022. https://www.phc.org.ua/sites/default/files/user90/risk_2022_14.pdf (accessed April 17 2022).

62. Public Health Center of the Ministry of Health of Ukraine. Weekly Public Health Risks Report: 13 Weeks of 2022 (March 28 - April 4). 2022. https://www.phc.org.ua/sites/default/files/user90/risk_2022_13.pdf (accessed April 17 2022).

63. Public Health Center of the Ministry of Health of Ukraine. Weekly Public Health Risks Report: 12 Weeks of 2022 (March 21-27). 2022. https://www.phc.org.ua/sites/default/files/user90/risk_2022_12.pdf (accessed April 17 2022).

64. Main Department of the State Food and Consumer Service in Rivne region. Botulism. 2022. https://www.rivneprod.gov.ua/2022/06/13/botulizm/ (accessed June 22 2022).

65. Public Health Center of the Ministry of Health of Ukraine. All-Ukrainian Poliomyelitis Vaccination Campaign: Results of the Third Week. 2022. https://phc.org.ua/news/vseukrainska-kampaniya-scheplennya-proti-poliomielitu-rezultati-tretogo-tizhnya (accessed April 17 2022).

66. Public Health Center of the Ministry of Health of Ukraine. HIV and TV Statistics in Ukraine: February 2022. 2022. https://phc.org.ua/news/statistika-vil-i-tb-v-ukraini-lyutyi-2022-roku (accessed April 17 2022).

67. Public Health Center of the Ministry of Health of Ukraine. HIV and TV Statistics in Ukraine: March 2022. 2022. https://phc.org.ua/news/statistika-vil-i-tb-v-ukraini-berezen-2022-roku (accessed April 17 2022).

68. Ministry of Finance. Coronavirus in Ukraine. 2022. https://index.minfin.com.ua/reference/coronavirus/ukraine/2022-02/ (accessed April 17 2022).

69. Cherkasy is bombing. There are automatic queues at the Customs. 2022. https://dzvin.media/news/cherkasy-bomblyat-lunayut-avtomatni-chergy-na-mytnyczi/ (accessed April 17 2022).

70. Word and Deed. The number of dead since the beginning of the war was announced in Chernihiv. 2022. https://www.slovoidilo.ua/2022/04/08/novyna/suspilstvo/chernihovi-ozvuchyly-kilkist-zahyblyx-pochatku-vijny (accessed June 22 2022).

71. Word and Deed. In the Chernihiv region, the number of dead and wounded civilians was announced. 2022. https://www.slovoidilo.ua/2022/05/25/novyna/suspilstvo/chernihivshhyni-nazvaly-kilkist-zahyblyx-ta-poranenyx-myrnyx-zhyteliv (accessed June 22 2022).

72. The New York Times. Maps: Tracking the Russian Invasion of Ukraine. 2022. https://www.nytimes.com/interactive/2022/world/europe/ukraine-maps.html?auth=login-google1tap&login=google1tap (accessed April 14 2022).

73. UN Office for the Coordination of Humanitarian Affairs (OCHA). Ukraine: Humanitarian Impact Situation Report (As of 12:00 p.m. (EET) on 1 April 2022). 2022. https://reliefweb.int/report/ukraine/ukraine-humanitarian-impact-situation-report-1200-pm-eet-1-april-2022 (accessed April 1st 2022).
74. Chernish O. BBC. "This is the agony of the enemy." Will the Russians turn Chernihiv into a second Mariupol? 2022. https://www.bbc.com/ukrainian/news-60832398?xtor=AL-73-%5Bpartner%5D-%5Bukr%5D-%5Bheadline%5D-%5Bukrained%5D-%5Bb Kazde v%5D-%5Bisapi%5D (accessed April 17 2022).

75. Ukrinform. The Russian military struck again at the airport in the Dnieper - it was completely destroyed. 2022. https://www.ukrinform.ua/rubric-ato/3453886-vijskovi-p confronted to-po-aeroportu-v-dnipri-vin-zrujnovanaj-povnisti.html (accessed April 17 2022).

76. Sinegubov O. Head of the Kharkiv Regional State Administration: Briefly about the situation in Kharkiv region as of June 7. 2022. https://t.me/s/syneugubov/3389 (accessed June 22 2022).

77. Wu J, Carman J, Einhorn E, Hersher M. NBC. Ukraine attacked: Map of sites targeted by Russia’s invasion. 2022. https://www.nbcnews.com/specials/ukraine-attacked-sites-targeted-russia-invasion/index.html (accessed April 14 2022).

78. Deutsche Welle (DW). In Kharkiv, 4 people died in the morning shelling - SES. 2022. https://www.dw.com/uk/ssha-zakryvaiut-nebo-dlia-rosiiskykh-litakiv/a-60976986 (accessed April 17 2022).

79. Ukrainian energy (UE). Energy in martial law (updated). 2022. https://ua-energy.org/uk/posts/enerhetyka-v-umovakh-viiskovohoStanu-onovluietsia (accessed April 4 2022).

80. Kharkiv Heat Networks continues to repair pipelines. 2022. https://www.city.kharkov.ua/uk/news/kharkivskiteplomerezhi-prodovzhuyut-remont-truboprovodiv-50396.html (accessed April 17 2022).

81. In Kharkiv, six damages to water mains were repaired. 2022. https://www.city.kharkov.ua/uk/news/u-kharkovi-usunuli-shist-poshkodzhen-na-vodovodakh-50400.html (accessed April 17 2022).

82. Interfax-Ukraine. Mobile operators in Kharkiv, Melitopol, Chernihiv and Sumy restore infrastructure - State Special Communications. 2022. https://interfax.com.ua/news/811333.html (accessed April 4 2022).

83. Telegram. Operational information of the State Special Communications Service on the operation of mobile networks as of 09:00 on March 11, 2022. https://t.me/dsszzi_official/2182 (accessed April 4 2022).

84. Cave D, Isai V. The New York Times. The State of Fighting in Ukraine’s Besieged Cities. 2022. https://www.nytimes.com/article/ukraine-cities.html (accessed April 14 2022).

85. DTEK returns electricity to 82,000 families left without electricity for the second time. 2022. https://www.dtek-kem.com.ua/ua/news/dtek-vdruge-povernu-elektroenergiyu-dlya-82-000-simey-v-kiyevi-shcho-zalishisya-bez-svitla-cherez-boyovi-diji (accessed April 4 2022).

86. Lysogol I. LB.ua. In Mariupol 20,000 civilians were killed, after yesterday's air bombs on Azovstal the number of wounded exceeded 600. 2022. https://lb.ua/society/2022/04/29/515177_mariupoli_zaginulo_20_000_mirnih.html (accessed June 22 2022).

87. Word and Deed. The UN has updated data on the victims of the Russian invasion of Ukraine. 2022. https://www.slovoidilo.ua/2022/06/01/novyna/susplstvo/oon- onovyla-dani-pro-zhertvy-rojskoho-vtorhnennya-ukrayini (accessed June 22 2022).

88. An extraordinary session of the Mariupol City Council took place. 2022. https://mariupolrada.gov.ua/news/vidbulasja-pozachergova-sesija-mariupolskoi-miskoi-radi (accessed April 4 2022).
89. Boyko I. The occupiers attacked Odessa from the air, the authorities gave advice to residents. 2022. https://www.unian.ua/war/viyna-v-ukrajini-2022-okupantividnachilisya-v-odesi-zhitelyam-dali PORADI-foto-novini-odesi-11770825.html (accessed April 17 2022).
90. Word and Deed. In the Sumy region, the number of civilians killed in the war was announced. 2022. https://www.slovoidilo.ua/2022/04/09/novyna/suspilstvo/sumshhyni-ozvuchyly-kilkist-zahyblyx-myrnyx-zhyteliv-cherez-vijnu (accessed June 22 2022).
91. Wikipedia. God of Sum (2022). 2022. https://uk.wikipedia.org/wiki/%D0%91%D0%BE%D1%97%D0%B7%D0%B0%A1%D1%83%D0%BC%D0%B8 (accessed April 17 2022).
92. Ukrinform. In Ukraine, 115 health care facilities were completely destroyed as a result of the Russian aggression. 2022. https://www.ukrinform.ua/rubic-society/3503501-v-ukrainsi-vnaslidok-agresii-rovni-n0vini-015-zakladiv-ohoroni-zdorova.html (accessed June 22 2022).
93. Chernihiv Regional State Administration. Road workers of Chernihiv region eliminate the consequences of hostilities and provide travel to the region. 2022. https://www.cg.gov.ua/index.php?id=452902&tp=page (accessed April 18 2022).
94. Ukrinform. Invaders of the Russian Federation fired at Chernihiv with cruise missiles. 2022. https://www.ukrinform.ua/rubic-ato/3417991-irosijski-zagarbniki-obstrilyali-budivli-policii-ta-likarni-0-192 (accessed April 18 2022).
95. Ukrinform. Russian troops fired on the center of Chernihiv - damaged clinics and homes. 2022. https://www.ukrinform.ua/rubic-ato/3414868-vijska-0rstrilali-centr-0-192 (accessed April 18 2022).
96. helsinki.org. Chronology of events in Kharkiv and Kharkiv region during the Russian-Ukrainian war. April 5, 2022. 2022. https://helsinki.org.ua/articles/khronolohiia-podiy-u-kharkovi-ta-kharkivskiy-oblast-pid-chas-rosiysko-ukrainskoii-viyny-5-kvitnia-2022-roku/ (accessed April 18 2022).
97. They searched the hospital, church, houses and enterprises - the consequences of the shelling of Dergachi. 2022. https://sus piline.media/226557-gatili-po-likarni-cerkvi-budinkah-ta-pidpriemstvah-naslidki-obstriliv-dergaciv/ (accessed April 18 2022).
98. ATN. A hospital and a medical center were shelled in Dergachi. 2022. https://atn.ua/kharkiv/v-derhachakh-obstrilyali-likarnyu-ta-tsentr-meddopomohy-367879/ (accessed April 18 2022).
99. Reed J. BBC. Ukraine war: WHO says attacks on health facilities are rising daily. 2022. https://www.bbc.com/news/health-60866669 (accessed April 17 2022).
100. KharkivToday (KT). A children's hospital and the Blood Service were shelled in Kharkiv. 2022. https://2day.kh.ua/ua/kharkow/u-kharkovi-obstrilyaly-dytyachu-likarnyu-ta-sluzhbu-krovi (accessed April 17 2022).
101. Novyny.live. The Russians fired on a children's rehabilitation center in the Kherson region. Photo. 2022. https://novyny.live/safety/rossiiane-obstrili-detskii-reabilitatsionnyi-tsentr-v-khersonskoi-oblasti-foto-42358.html (accessed April 18 2022).
102. Television news service (TCH). The Russian army fired at the village in the Kherson area: the shell hit the children's rehabilitation center. 2022. https://tsn.ua/ato/rosiyska-armiya-obstrilyala-selo-v-nerskoi-oblasti-nadzh-yuv-chuv-0-nagrani-0-centr-reabilitaci-0-ditey-2004988.html (accessed April 18 2022).
103. Komissarov A. The shelling in Kyiv. The Okhmatdyt doctor spoke about the condition of the injured child. 2022. https://sus piline.media/211628-obstrili-u-kievli-likar-0hmatditi-0rozpyov-pro-stan-0poranenni-ditini/ (accessed April 17 2022).
104. Khlebnikov V. BIG KYIV. A medical center with seriously ill patients suffered from the shelling of the occupiers in Kyiv. 2022. https://bigkyiv.com.ua/vid-obstriliv-okupantiv-v-kyiviyi-postrazhdav-medcentr-z-tyazkohvorymy-pacientamy/ (accessed April 17 2022).

105. Television news service (TCH). In the Kyiv region, the Russian occupiers fired on a maternity hospital and a rehabilitation center. 2022. https://kyiv.tsn.ua/u-kiyivskiy-oblasti-rosiyski-okupanti-obstrilyali-pologoviy-budinok-ta-reabilitaciyny-centr-1992757.html (accessed April 17 2022).

106. KyivGovernment. In Makarov, Kyiv region, the occupiers shot at Hurricanes medical center, kindergarten and houses. 2022. https://kievvlast.com.ua/news/v-makarovi-na-kivshhini-okupanti-rozstrilyali-uraganami-mediczhny-tsentr-sadochok-ta-budinki (accessed April 18 2022).

107. Ukraine war: Three dead as maternity hospital hit by Russian air strike. 2022. https://www.bbc.com/news/world/europe-60675599 (accessed April 17 2022).

108. Boyko I. Unian. Russian occupiers shelling hospital in Mariupol, 400 people held hostage. 2022. https://www.unian.ua/war/rosiyan-vvedut-obstril-iz-likarni-v-mariupoli-400-lyudey-u-zaruchnikah-novini-vtorgnennya-rosiji-v-ukrajinu-11745916.html (accessed April 18 2022).

109. nv.ua. Burning houses in Kyiv region and destruction in Mariupol. Maxar showed new satellite images of Ukraine. 2022. https://nv.ua/ukr/world/countries/vyhniv-v-ukrajini-maxar-pokazala-novi-znimki-poshkode-hen-u-mariupoli-foto-50225080.html (accessed April 18 2022).

110. Balachuk I. Ukrainian Pravda. The occupiers took hostage a hospital in Mariupol - the head of the region. 2022. https://www.pravda.com.ua/news/2022/03/15/7331610/ (accessed April 18 2022).

111. Petrenko R. Ukrainian Pravda. Occupiers specially bomb the building with a red cross in Mariupol - "Azov". 2022. https://www.pravda.com.ua/news/2022/03/30/7335738/ (accessed April 17 2022).

112. Ukrinform. The occupiers fired on the oncology center in Melitopol. 2022. https://www.ukrinform.ua/rubric-ato/3413016-okupanti-obstrilali-onkodispenser-u-melitopol.html (accessed April 17 2022).

113. Television news service (TCH). The oncology hospital in Nikolaev came under attack of occupiers: a photo and video of consequences. 2022. https://tsn.ua/ato/pid-obstril-okupantiv-potapila-onkologichna-likarnya-u-nikolayevi-foto-i-video-nasilkov-2006536.html (accessed April 17 2022).

114. Ukrinform. The invaders destroyed a hospital in Rubizhne and blame the Armed Forces for this. 2022. https://www.ukrinform.ua/rubric-ato/3451307-zagarbniki-zrujnuvali-likarnu-u-rubiznomu-i-zvinuvacu-u-comu-zsu.html (accessed April 17 2022).

115. Ukrinform. In Severodonetsk, the invaders fired on the regional hospital. 2022. https://www.ukrinform.ua/rubric-regions/3432879-u-severodonecku-zagarbniki-obstrilali-oblasnu-likarnu.html (accessed April 17 2022).

116. Duck P. VOICE. Rashists opened fire on a children's hospital in Severodonetsk (photo). 2022. https://vgolos.ua/news/rashisti-vykrili-vogon-po-dityachiy-likarni-u-sievierodonecku-foto_1417592.html (accessed April 17 2022).

117. The Russian military fired on the hospital in Vasylivka: there are casualties. 2022. https://suspilne.media/213421-vijskovi-rf-obstrilali-likarnu-u-vasilivci-e-zagibli/ (accessed April 17 2022).
118. Stepura A. suspilne.media. Wave for the second day under fire: no light, gas, food, people in the basement. 2022. https://suspilne.media/211772-volnovaha-drugu-dobu-obstrilami-nema-svitla-gazu-izi-ludi-po-pidvalah/ (accessed April 18 2022).

119. Ukraine: Russian Cluster Munition Hits Hospital. 2022. https://www.hrw.org/news/2022/02/25/ukraine-russian-cluster-munition-hits-hospital# (accessed April 17 2022).

120. Roschina O. Ukrainian Pravda. The occupiers hit a hospital in Vugledar: 4 dead and 10 wounded. 2022. https://www.pravda.com.ua/news/2022/02/24/7325441/ (accessed April 17 2022).

121. RBC-Ukraine. Russian aircraft attacked Zhytomyr city hospital. The city will turn off the lights at night - Sukhmolin. 2022. https://www.rbc.ua/ukr/news/rossiyskaya-aviatsiya-atakovala-gorodskuyu-1646859693.html (accessed April 17 2022).

122. Gamalii I. LB.ua. About 40 Ukrainian prisoners were killed in an attack by the occupiers on Olenivka, - Prosecutor General's Office. 2022. https://lb.ua/society/2022/07/29/524713_vid_udaru_okupantiv_olenivtsi.html (accessed August 8 2022).

123. Amnesty International. Russian military commits indiscriminate attacks during the invasion of Ukraine. 2022. https://www.amnesty.org/en/latest/news/2022/02/russian-military-commits-indiscriminate-attacks-during-the-invasion-of-ukraine/ (accessed June 27 2022).

124. Amnesty International. Ukraine: Russia’s cruel siege warfare tactics unlawfully killing civilians – new testimony and investigation. 2022. https://www.amnesty.org/en/latest/news/2022/04/ukraine-russias-cruel-siege-warfare-tactics-unlawfully-killing-civilians-new-testimony-and-investigation/ (accessed June 27 2022).

125. Amnesty International. RUSSIA’S WAR ON UKRAINE: All the latest news and updates. 2022. https://www.amnesty.org/en/latest/news/2022/03/latest-news-on-russias-war-on-ukraine/ (accessed June 27 2022).

126. Amnesty International. Ukraine: Russian forces must face justice for war crimes in Kyiv oblast. 2022. https://www.amnesty.org/en/latest/news/2022/05/ukraine-russian-forces-must-face-justice-for-war-crimes-in-kyiv-oblast-new-investigation/ (accessed June 27 2022).

127. Amnesty International. “ANYONE CAN DIE AT ANY TIME”: Indiscriminate attacks by Russian forces in Kharkiv, Ukraine. 2022. https://www.amnesty.org/en/latest/research/2022/06/anyone-can-die-at-any-time-kharkiv/ (accessed June 27 2022).

128. Amnesty International. Ukraine: hundreds killed in relentless Russian shelling of Kharkiv. 2022. https://www.amnesty.org/en/latest/news/2022/06/ukraine-hundreds-killed-in-relentless-russian-shelling-of-kharkiv-new-investigation/ (accessed June 27 2022).

129. Action on Armed Violence (AOAV). Ukraine: AOAV explosive violence data on harm to civilians. 2022. https://aoav.org.uk/2022/ukraine-casualty-monitor/ (accessed June 27 2022).

130. United Nations. Ukraine: Civilian casualties. 2022. https://ukraine.un.org/en/resources/publications (accessed June 27 2022).

131. Mirny M, Shevchik O. ZMINA. Losses among civilians and facilities from the Russian invasion (updated). 2022. https://zmina.info/articles/vtraty-sered-czyvilnyh-gromadayant-a-obyektiv-vid-vtorgnennya-roziyi-onovlyuyetsya/ (accessed April 18 2022).
132. Zubar D. suspilne.media. 21 dead and 39 people in the hospital: what is known about the tragedy in Serhiivka, Odesa region. VIDEO. 2022. https://suspilne.media/256029-najbilsa-kilkist-zagiblih-vid-pocatku-vtorgnenna-so-vidomo-pro-tragediu-v-sergiivci-odeskoi-oblasti-video/ (accessed August 8 2022).

133. rayon.in.ua. The situation regarding the Russian invasion of Ukraine on July 7. 2022. https://rayon.in.ua/news/527821-situatsiya-shchodo-rosiyskogo-vtorgnennya-v-ukrainu-7-lipnya (accessed August 4 2022).

134. LB.ua. Goal for the night. Friday, July 8: the enemy's offensive in Donetsk region, shelling of Chernihiv region and Kharkiv, an attempt on the ex-prime minister of Japan, a fence on the Finnish border. 2022. https://lb.ua/society/2022/07/08/522542_golovne_nich_pyatnitsya_8_lipnya.html (accessed August 8 2022).

135. Tyshenko K. pravda.com.ua. In Donetsk region, the Russians killed 3 more and injured 23 people. 2022. https://www.pravda.com.ua/news/2022/07/9/7357264/ (accessed August 8 2022).

136. suspilne.media. Russia's invasion of Ukraine, day 139. 2022. https://suspilne.media/259499-vtorgnenna-rosii-v-ukrainu-den-139-tekstovij-onlajn/ (accessed August 8 2022).

137. Lysohor I. In the morning, the enemy fired at a kindergarten in Toretsk and launched a massive rocket attack on Mykolaiv, - OVA. 2022. https://lb.ua/society/2022/07/12/522881_urantsi_vorog_obstrilyav_ditsadok.html (accessed August 8 2022).

138. LB.ua. The main thing for the day. Wednesday, July 13. 2022. https://lb.ua/society/2022/07/13/523089_golovne_den_sereda_13_lipnya.html (accessed August 8 2022).

139. Kovalevska E. BBC. Russia's largest strikes on civilian objects in Ukraine, which killed hundreds of people. 2022. https://www.bbc.com/ukrainian/news-62150693 (accessed August 8 2022).

140. Podhola J. suspilne.media. The Russian army launched missile strikes on the Dnipro, killing three people and wounding 15. What is known. 2022. https://suspilne.media/261066-u-dnipri-prolunala-seria-vibuhiv-so-vidomo/ (accessed August 8 2022).

141. suspilne.media. Russia's invasion of Ukraine, day 137. 2022. https://suspilne.media/258934-vtorgnenna-rosii-v-ukrainu-den-137-tekstovij-onlajn/ (accessed August 8 2022).

142. Interfax-Ukraine. Last day, three residents of Donetsk region were killed and twelve were wounded as a result of shelling. 2022. https://ua.interfax.com.ua/news/general/846487.html (accessed August 8 2022).

143. Ukrinform. The Russians killed two civilians of Donetsk region yesterday, another 10 were injured. 2022. https://www.ukrinform.ua/rubric-ato/3531355-rosiani-minuloi-dobi-vbili-dvoh-mirnih-ziteliv-donecchini-se-10-poraneni.html (accessed August 8 2022).

144. rayon.in.ua. The situation regarding the Russian invasion of Ukraine on July 18. 2022. https://rayon.in.ua/news/530059-situatsiya-shchodo-rosiyskogo-vtorgnennya-v-ukrainu-18-lipnya (accessed August 8 2022).

145. espreso.tv. In Donetsk region, the Russians killed 5 civilians and wounded 16 more in a day. 2022. https://espreso.tv/na-donechchini-rosiyan-za-dobu-vbili-5-tsivilnikh-i-poranili-shche-16 (accessed August 8 2022).
146. ZMINA. The Russians shelled the Zaporizhzhia region: one person was killed and three were wounded. 2022. https://zmina.info/news/rosiyany-obstrilyaly-zaporizku-oblast-zagynula-odna-lyudyna-troye-poraneni/ (accessed August 8 2022).

147. Interfax-Ukraine. In Donetsk region, the Russians killed five civilians and injured ten more. 2022. https://ua.interfax.com.ua/news/general/847736.html (accessed August 8 2022).

148. Mazurenko A. pravda.com.ua. Donetsk region: 9 wounded per day from Russian shelling. 2022. https://www.pravda.com.ua/news/2022/07/23/7359734/ (accessed August 8 2022).

149. LB.ua. The main thing for the day. Saturday, July 23. 2022. https://lb.ua/society/2022/07/23/524099_golovne_den_subota_23_lipnya.html (accessed August 8 2022).

150. suspilne.media. On July 24, 8 people were injured in Donetsk region as a result of the Russian invasion of Ukraine. 2022. https://suspilne.media/264027-na-doneccini-vnaslidok-vtorgnenna-rf-v-ukrainu-24-lipna-poraneno-8-ludej/ (accessed August 8 2022).

151. Romanenko V. pravda.com.ua. Russians are killing Donetsk residents: 3 people were killed and 8 were wounded in a day. 2022. https://www.pravda.com.ua/news/2022/07/26/7360187/ (accessed August 9 2022).

152. Interfax-Ukraine. Yesterday, as a result of shelling in the Donetsk region, one person was killed and one was injured. 2022. https://interfax.com.ua/news/general/848729.html (accessed August 9 2022).

153. Interfax-Ukraine. The number of victims of the shelling of Bakhmut increased to three, and three were injured. 2022. https://ua.interfax.com.ua/news/general/849176.html (accessed August 9 2022).

154. Interfax-Ukraine. Yesterday, 8 people were killed and 19 were injured as a result of shelling in the Donetsk region. 2022. https://ua.interfax.com.ua/news/general/849221.html (accessed August 9 2022).

155. Television news service (TCH). Shelling of Chernihiv region and artillery strikes in Donetsk region: what is the situation in the regions on July 30. 2022. https://tsn.ua/ato/obstrili-chernigivschini-ta-artileriyski-udari-na-donechchini-yaka-situaclya-u-regionah-30-lipnya-2122594.html (accessed August 9 2022).

156. Action on Armed Violence (AOAV). Ukraine: AOAV explosive violence data on harm to civilians. 2022. https://aoav.org.uk/2022/ukraine-casualty-monitor/ (accessed August 9 2022).

157. Public Health Center of the Ministry of Health of Ukraine. Second case of poliomyelitis confirmed in Ukraine: in a two-year-old boy 2022. https://phc.org.ua/news/v-ukraini-pidtverdzheno-drugi-vipadok-poliomielitu-udvorichnogo-kholopchika (accessed August 9 2022).

158. pravda.com.ua. “Ruble occupation” of the south of Ukraine. 54th day of the war. ONLINE. 2022. https://www.pravda.com.ua/ru/articles/2022/04/18/7340321/ (accessed June 27 2022).

159. pravda.com.ua. War. Day 59. ONLINE. 2022. https://www.pravda.com.ua/ru/articles/2022/04/23/7341513/ (accessed June 27 2022).

160. Alena M. pravda.com.ua. In the Donetsk region, the Russians shelled a village: 30 houses were damaged. 2022. https://www.pravda.com.ua/ru/news/2022/04/11/7338908/ (accessed June 27 2022).
161. Karlovskii D. pravda.com.ua. Luhansk region: as a result of the shelling of Russian invaders in Novodruzhesk, a man died. 2022. https://www.pravda.com.ua/rus/news/2022/04/12/7339138/ (accessed June 27 2022).
162. pravda.com.ua. Azov - steel. 57th day of the war with Russia. ONLINE. 2022. https://www.pravda.com.ua/rus/articles/2022/04/21/7341048/ (accessed June 27 2022).
163. Aussiedlerbote. War in Ukraine on March 26. 2022. https://aussiedlerbote.de/2022/03/vojna-v-ukraine-26-marta/ (accessed June 27 2022).
164. nv.ua. Missile attack on Lutsk: the missile was fired from the territory of Belarus - the head of the Regional State Administration. 2022. https://nv.ua/ukraine/events/raketa-na-volyni-priletela-iz-belarusi-novosti-ukrainy-50228850.html (accessed June 27 2022).
165. Apostrophe. AFU liberated an important city near Kyiv, the occupier launched a missile attack on the Rivne region: a chronicle of the events of the war on March 28. 2022. https://apostrophe.ua/news/society/2022-03-29/tyajelyie-boi-pod-izyumom-i-mariupolem-onlayn-sobytity-voynyi-28-marta-264130 (accessed June 27 2022).
166. nv.ua. 34th day of the war - chronicle. Under the rubble of the Nikolaev Regional State Administration, 12 bodies were found, the number of people who left Ukraine reached 4 million people. 2022. https://nv.ua/ukraine/events/voyna-v-ukraine-29-marta-hod-peregovorov-segodnya-glavnye-boi-i-poteri-rf-novosti-ukrainy-50229189.html (accessed June 27 2022).
167. Serebryanaya O. Currenttime. March 30. Russia always fights like this. 2022. https://www.currenttime.tv/a/semsorok-russia-has-always-fought-like-that/31777195.html (accessed June 27 2022).
168. Aussiedlerbote. War in Ukraine April 2. 2022. https://aussiedlerbote.de/2022/04/vojna-v-ukraine-2-aprelya/ (accessed June 27 2022).
169. nv.ua. 39th day of the war - results. Ukraine and the world are shocked by the monstrous crimes of the Russian military in Bucha. 2022. https://nv.ua/ukraine/events/voyna-v-ukraine-situaciya-pod-kievom-segodnya-glavnye-sobytitya-boi-novosti-ukrainy-50230620.html (accessed June 27 2022).
170. pravda.com.ua. Kharkiv region: Russians killed 10 civilians in a day, including a child. 2022. https://www.pravda.com.ua/rus/news/2022/04/10/7338679/ (accessed June 27 2022).
171. Nechiporenko M. thepage.ua. Operational information about the Russian-Ukrainian war at 18:00 April 5, 2022. 2022. https://thepage.ua/news/operativnaya-informaciya-o-rossijsko-ukrainskoj-vojne-5042022 (accessed June 27 2022).
172. Telegram. Zaporizhia Regional Military Administration: Enemy shelling continues to destroy utility networks. 2022. https://t.me/zoda_gov_ua/8711 (accessed August 9 2022).
173. Bogdanok O. suspilne.media. Shelling of Dnipropetrovsk region, Sumy region, Mykolaiv region, battles in Donbas. How was the night in the regions. 2022. https://suspilne.media/247406-obstrili-dnipropetrovsvini-sumsini-mikolaivsvini-boi-nadobasi-ak-minula-nic-u-regionah/ (accessed August 9 2022).
174. 24tv.ua. The explosion in Kherson and the terrible rocket attacks of Mykolaiv region: the main points of the 104th day of the war. 2022. https://24tv.ua/ru/104-den-vojny-v-ukraine-07-06-2022-novosti-za-sutki_n1996884 (accessed August 9 2022).
175. Ryazantseva A, Mavrychev V. suspilne.media. A Russian rocket destroyed a supermarket in Kharkiv: photo. 2022. https://suspilne.media/247820-rosijska-raketa-zrujnuvala-supermarket-u-harkovi-foto/ (accessed August 9 2022).
176. Telegram. Evgeny Sytnychenko / Kryvorizky district. 2022. https://t.me/evgendoberman/237 (accessed August 9 2022).

177. skeptik.com.ua. War in Ukraine June 9, 2022 — news, online, summary today. 2022. https://skeptik.com.ua/voina-v-ukraine-9-iyunya-2022-novosti-onlain-svodka-segodnia/ (accessed August 9 2022).

178. Telegram. Dmytro Zhivytsky / Sumy OVA: The situation as of 22:00 June 10, 2022. 2022. https://t.me/Zhyvytskyy/2528 (accessed August 9 2022).

179. Pomydorov I, Abrashina K. vesti.ua. Chronology of the war in Ukraine: Friday, June 10. 2022. https://vesti.ua/strana/hronologiya-voyn-v-ukraine-pyatnitsa-10-iyunya-obnovlyaetsya (accessed August 9 2022).

180. Solodovnik M, Hnatiuk I. suspilne.media. Two people died during the shelling of Zolochev in the Kharkiv region on June 11. 2022. https://suspilne.media/249240-dvoe-ludej-zaginuli-pid-cas-obstrilu-zoloceva-na-harkivsini-11-cervna/ (accessed August 9 2022).

181. Balachuk I. pravda.com.ua. Donetsk region: the occupiers inflicted 16 blows, including casualties. 2022. https://www.pravda.com.ua/rus/news/2022/06/11/7351894/ (accessed August 9 2022).

182. suspilne.media. News for June 12, 2022. 2022. https://suspilne.media/archive/2022/6/12/ (accessed August 9 2022).

183. Lubenets G. telegraf.com.ua. War - day 109: the Armed Forces of Ukraine advance to the south of Ukraine, and Russia prepares for a long war. 2022. https://telegraf.com.ua/ukraina/2022-06-12/5707579-viyna-den-109-zsu-nastupayut-napivdni-ukrainsi-a-rosiya-gotuetsya-do-trivaloi-viyny (accessed August 9 2022).

184. Telegram. Dmytro Zhivytsky / Suny OVA: The situation as of 21:30 June 13, 2022. 2022. https://t.me/Zhyvytskyy/2550 (accessed August 9 2022).

185. Kornylov M. telegraf.com.ua. The war is day 110: the invaders continue to advance on Donbas, depleting their army. 2022. https://telegraf.com.ua/ukraina/2022-06-13/5707660-viyna-den-110-okkupanty-prodolzhayut-nastupat-na-donbasse-istoshchaya-svoyu-armiyu (accessed August 9 2022).

186. suspilne.media. News for June 14, 2022. 2022. https://suspilne.media/archive/2022/6/14/ (accessed August 9 2022).

187. suspilne.media. News for June 15, 2022. 2022. https://suspilne.media/archive/2022/6/15/ (accessed August 9 2022).

188. 24tv.ua. Biden announced a new package of military aid, the "Ramstein-3" meeting: the main thing for the 112th day of the war. 2022. https://24tv.ua/ru/112-den-vojny-v-ukraine-15-06-2022-novosti-za-sutki_n2020575 (accessed August 9 2022).

189. Telegram. Pavlo Kyrylenko / Donetsk State Administration (OVA): Russia kills civilians! (for June 16). 2022. https://t.me/pavlokrylenko_donoda/3704 (accessed August 9 2022).

190. dw.com. UN: 4,481 civilians have died in Ukraine since the beginning of the military aggression of the Russian Federation. 2022. https://www.dw.com/ru/voyna-ukraina-rossija-16-iyunya-2-a-62147540 (accessed August 9 2022).

191. Petrenko R. pravda.com.ua. Russians hit Nikolaev with a rocket: 2 dead and 20 wounded. 2022. https://www.pravda.com.ua/rus/news/2022/06/17/7352992/ (accessed August 9 2022).

192. Ganyukova O. war.obozrevatel.com. The occupiers staged a new shelling of Kharkov, the launch of rockets was recorded in Belgorod. 2022. https://war.obozrevatel.com/okkupantyi-ustroili-novyij-obstrel-harkova-zapusk-raket-zafiksirovali-v-belgorode-video.htm (accessed August 9 2022).
193. Lubenets G. telegraf.com.ua. War - day 116: the occupiers have withdrawn reserves to Luhansk region and are preparing to attack. 2022. https://telegraf.com.ua/ukraina/2022-06-19/5708185-viyna-den-116-okupanti-styagnuli-rezervi-na-luganshchinu-i-gotuyutsya-do-nastupu (accessed August 9 2022).

194. Apostrophe. The failure of the enemy's offensive in the east and the strikes of the Armed Forces of Ukraine in the south of Ukraine: the chronicle of the war on June 20. 2022. https://apostrophe.ua/news/politics/2022-06-20/proval-nastupleniya-vraga-na-vostoke-i-udaryi-vsu-na-yuge-ukrainyi-onlayn-voynyi-20-iyunya/272261 (accessed August 9 2022).

195. Telegram. Dmytro Zhivytsky / Sumy OVA: The situation as of 22:00 June 21, 2022. 2022. https://t.me/Zhyvytskyy/2725 (accessed August 9 2022).

196. Balachuk I, Tyschenko K. pravda.com.ua. Hit on the metro facility in Kharkiv: an employee was injured, the trains were damaged. 2022. https://www.pravda.com.ua/rus/news/2022/06/21/7353791/ (accessed August 9 2022).

197. Telegram. Pavlo Kyrilenko / Donetsk State Administration (OVA): Russia kills civilians! (for June 20). 2022. https://t.me/pavlokrylenko_donoda/3724 (accessed August 9 2022).

198. Telegram. Pavlo Kyrilenko / Donetsk State Administration (OVA): Russia kills civilians! (for June 22). 2022. https://t.me/pavlokrylenko_donoda/3751 (accessed August 9 2022).

199. Telegram. DPSU | State Border Service: The enemy attacked Sumy Oblast with incendiary shells. 2022. https://t.me/DPSUkr/4879 (accessed August 9 2022).

200. suspilne.media. News for June 24, 2022. 2022. https://suspilne.media/archive/2022/6/24/ (accessed August 9 2022).

201. suspilne.media. News for June 25, 2022. 2022. https://suspilne.media/archive/2022/6/25/ (accessed August 9 2022).

202. Telegram. Dmytro Zhivytsky / Sumy OVA: The situation as of 22:30 June 23, 2022. 2022. https://t.me/Zhyvytskyy/2816 (accessed August 9 2022).

203. Panchenko A. war.obozrevatel.com. Strong explosions rumbled in Kharkov: part of the city was left without power. 2022. https://war.obozrevatel.com/v-harkove-progremeli-silnyie-vzryivyi-chast-goroda-ostalas-bez-sveta.htm (accessed August 9 2022).

204. Ivanov P. suspilne.media. Rescuers from Kirovohrad Oblast were involved in eliminating the consequences of shelling in Kremenchuk. 2022. https://suspilne.media/254714-ratuvalnikiv-z-kirovogradsini-zalucili-do-usunenna-naslidkiv-obstrilu-v-kremencuci/ (accessed August 9 2022).

205. Telegram. Zelenodol city territorial community: Information for the evening 30.06.2022 Zelenodol community. 2022. https://t.me/zelenodolskatg/1136 (accessed August 9 2022).

206. Mazurenko A. pravda.com.ua. The Russians shelled Kryvorozhskaya TPP - regional council. 2022. https://www.pravda.com.ua/rus/news/2022/06/28/7355257/ (accessed August 9 2022).

207. Telegram. Zelenodol city territorial community: Information for the evening 30.06.2022 Zelenodol community. 2022. https://t.me/zelenodolskatg/1136 (accessed August 9 2022).
210. suspilne.media. News for July 1, 2022. 2022. https://suspilne.media/archive/2022/7/1/ (accessed August 9 2022).
211. Zadorenko V. Facebook. July 2. Report of the city mayor 2022. https://www.facebook.com/Zadorenko/posts/pfbid02iTn8A6wZW15hvWUm5Vqgf3tbTqrG7CRxGjT3jZ9aiMzYxe7788C6nMcMcDC6H8bX1 (accessed August 9 2022).
212. Ganyukova O. war.obozrevatel.com. Russian troops continue shelling the liberated territories of the Kherson region, - Vylk. 2022. https://war.obozrevatel.com/vojskarf-prodolzhatyay-obstrelyi-ovsobodzenyih-territorij-hersonschiniy-vilkul.htm (accessed August 9 2022).
213. Telegram. Valentyn Reznichenko/ Dnipropetrovsk State Administration (OVA): Dnipropetrovsk region July 3. 2022. https://t.me/dnipropetrovskaODA/1243 (accessed August 9 2022).
214. 24tv.ua. The withdrawal of the Armed Forces from Lysychansk, the shelling of Slavyansk: the main highlights of the 130th day of the war. 2022. https://24tv.ua/ru/130-den-vojny-v-ukraine-glavnye-novosti-3-ijulja-2022-24-kanal_n2055303 (accessed August 9 2022).
215. suspilne.media. News for July 4, 2022. 2022. https://suspilne.media/archive/2022/7/4/ (accessed August 9 2022).
216. Petrenko R. pravda.com.ua. The occupiers report explosions and a large fire at the Donetsk railway station. 2022. https://www.pravda.com.ua/rus/news/2022/07/4/7356345/ (accessed August 9 2022).
217. Telegram. Dmytro Zhivyttsky / Sumy OVA: The situation as of 23:00 July 5, 2022. https://t.me/Zhyvytskyy/2969 (accessed August 9 2022).
218. 24tv.ua. Restrictions for conscripts, explosions at enemy warehouses: the main points for the 132nd day of the war. 2022. https://24tv.ua/ru/132-den-vojny-v-ukraine-05-07-2022-novosti-za-sutki_n2073502 (accessed August 9 2022).
219. Telegram. Mykola Lukashuk - the head of the DOR: Russia's full-scale military invasion of Ukraine, 133 days, is coming to an end. 2022. https://t.me/mykola_lukashuk/695 (accessed August 9 2022).
220. Balachuk I. pravda.com.ua. The Russians hit Toretsk with missiles: people are under rubble. 2022. https://www.pravda.com.ua/rus/news/2022/07/6/7356624/ (accessed August 9 2022).
221. suspilne.media. Russia's invasion of Ukraine, day 134. 2022. https://suspilne.media/257910-vtorgnenna-rosii-v-ukrainu-den-134-tekstovij-onlajn/ (accessed August 9 2022).
222. Telegram. Dmytro Zhivyttsky / Sumy OVA: The situation as of 21:00 July 8, 2022. https://t.me/Zhyvytskyy/3019 (accessed August 9 2022).
223. 24tv.ua. 12 dead and 30 injured civilians: how did the day of July 7 pass in the regions. 2022. https://24tv.ua/ru/novosti-ukrainy-8-ijulja-2022-kak-proshli-sutki-vo-oblajstjah-24-kanal_n2080899 (accessed August 9 2022).
224. suspilne.media. News for July 9, 2022. 2022. https://suspilne.media/archive/2022/7/9/ (accessed August 9 2022).
225. suspilne.media. News for July 10, 2022. 2022. https://suspilne.media/archive/2022/7/10/ (accessed August 9 2022).
226. Roschyna E. pravda.com.ua. Near Kryvyi Rih, Russian rockets destroyed the enterprise. 2022. https://www.pravda.com.ua/rus/news/2022/07/10/7357302/ (accessed August 9 2022).
227. Yakymyuk I. suspilne.media. Russian troops fired 7 rockets at Odesa region: one hit a residential building. 2022. https://suspilne.media/259225-po-odesini-rosijski-vijska-vipustili-4-raketi-odna-vlucila-v-budivlu/ (accessed August 9 2022).
Facebook. Air Force Command of UA Armed Forces: Since the beginning of a full-masse invasion, the air force strikes 1700 group air attacks on the occupation forces 2022. https://www.facebook.com/kpszsu/posts/pfbid0Cwopsba5ZmaXFr9bAfLQbko1zJr1e4C7yG9r2vojXaykYe3D3Rc21kJTfC6u4ul (accessed August 9 2022).

229. Telegram. Zaporizhia Regional Military Administration: WARNING! 2022. https://t.me/zoda_gov_ua/10357 (accessed August 9 2022).

230. Pavlova A, Abrashina K. vesti.ua. Chronology of the war in Ukraine: Wednesday, July 13. 2022. https://vesti.ua/strana/hronologiya-vojny-v-ukraine-sreda-13-iyulya-obnovlyaetsya (accessed August 9 2022).

231. Podhola J. suspilne.media. Missile strike on Dnipro July 15: Air defense destroyed four of six Kh-101 missiles launched by the Russian army from the Caspian Sea. 2022. https://suspilne.media/261084-raketnj-udar-po-dnipru-15-ripn-ppo-znisilacotiriraketi-h-101/ (accessed August 9 2022).

232. Telegram. Dmytro Zhivytsky / Sumy OVA: The situation as of 22:00 July 16, 2022. https://t.me/Zhyvytskyy/3224 (accessed August 9 2022).

233. Ganyukova O. war.obozrevatel.com. Russian troops hit Pokrovsk with Iskander missiles: there are dead and wounded, a lot of destruction. 2022. https://war.obozrevatel.com/vojska-rf-udarili-raketoj-iskander-po-pokrovsku-est-pogibshie-i-ranenyie-mmogo-razrushenij-foto.htm (accessed August 9 2022).

234. suspilne.media. News for July 17, 2022. 2022. https://suspilne.media/archive/2022/7/17/ (accessed August 9 2022).

235. 24tv.ua. Shelling of Nikolaev with S-300 missiles, the displacement of Venediktova and Bakanov: the main highlights of the 144th day of the war. 2022. https://24tv.ua/ru/144-den-vojny-v-ukraine-17-07-2022-novosti-za-sutki_n2096834 (accessed August 9 2022).

236. Bobkov D. suspilne.media. Russian troops shelled Mykolaiv for the second time in a day. 2022. https://suspilne.media/261893-rosijski-vijska-vdruge-za-dobu-obstrilali-mikolaiv/ (accessed August 9 2022).

237. 24tv.ua. The Ukrainian Armed Forces destroyed the Russians' warehouse, the enemy's attack on Bakhmut: the main highlights of the 145th day of the war. 2022. https://24tv.ua/ru/145-den-vojny-v-ukraine-18-07-2022-novosti-za-sutki_n2096911 (accessed August 9 2022).

238. Facebook. Odesa District State Administration: A rocket hit was hit on the population of Odessa district yesterday! . 2022. https://www.facebook.com/100068947638352/posts/pfbid0QtBnGSxqwqOLSMp5Wg4uFOqspfYUH6sJpHt5fTTT1TY1dU242GJ7EkJZaPuxCPhl/ (accessed August 9 2022).

239. Chlek C. suspilne.media. The church and power grids were damaged - the Russian army shelled the Esman community in the Sumy region. 2022. https://suspilne.media/262590-poskodzeni-cerkva-ta-elektromerezi-armia-rf-obstrilala-esmansku-gromadu-na-sumsini/ (accessed August 9 2022).

240. Balachuk I. pravda.com.ua. Occupiers attacked Kharkiv: 3 dead. 2022. https://www.pravda.com.ua/rus/news/2022/07/20/7359104/ (accessed August 9 2022).

241. Tsyomyk A, Hnatiuk I. suspilne.media. On July 22, an 89-year-old woman was injured as a result of shelling of Zolochev in Kharkiv region. 2022. https://suspilne.media/263539-vnaslidok-obstrilu-zoloceva-na-harkivsini-22-lipna-89-ricana-zinka-otrimala-poranenna/ (accessed August 9 2022).

242. Apostrophe. The occupiers are failing on all fronts: a chronicle of the war in Ukraine on July 22. 2022. https://apostrophe.ua/news/world/2022-07-22/okkupantyi-terpyat-
neudachi-na-vseh-napravleniyah-onlayn-voynyi-v-ukraine-22-iyulya/274875 (accessed August 9 2022).

243. Voytiuk T, Yakymyuk I, Kolomiets D. suspilne.media. The Russian army struck the Odesa port, where the grain was located: what is known. 2022. https://suspilne.media/263646-rosiani-zavdali-raketnij-udar-po-odeskomu-portu-ok-pivden/ (accessed August 9 2022).

244. Telegram. Dmytro Zhivyttsky / Sumy OVA: The situation as of 22:00 July 24, 2022. 2022. https://t.me/Zhyvytskyy/3408 (accessed August 9 2022).

245. Rudomskyi R. war.obozrevatel.com. The occupiers hit the Dnieper with rockets, after the explosions a fire started. 2022. https://war.obozrevatel.com/vojska-rf-udarili-raketami-po-dnepru-posle-vzryivov-nachalsya-pozhar-foto-i-video.htm (accessed August 9 2022).

246. suspilne.media. News for July 25, 2022. 2022. https://suspilne.media/archive/2022/7/25/ (accessed August 9 2022).

247. Apostrophe. Night strikes of the enemy and new equipment of the Armed Forces of Ukraine on the battlefield: the chronicle of the war on July 25. 2022. https://apostrophe.ua/news/politics/government/2022-07-25/nochnyie-udaryi-vraga-i-novaya-tehnika-vsu-na-bole-borya-onlayn-voynyi-25-iyulya/275064 (accessed August 9 2022).

248. Telegram. Dmytro Zhivyttsky / Sumy OVA: The situation as of 21:30 July 26, 2022. 2022. https://t.me/Zhyvytskyy/3432 (accessed August 9 2022).

249. Hluschenko O, Balachuk I. pravda.com.ua. At night, the Russians shelled Kharkov and Chuguev from S-300s. 2022. https://www.pravda.com.ua/rus/news/2022/07/26/7360178/ (accessed August 9 2022).

250. Zubar D. suspilne.media. They are harming Ukraine and disposing of old projectiles: the expert spoke about the shelling of Odesa by Soviet missiles. 2022. https://suspilne.media/265107-skodat-ukraini-ta-utilizuut-stari-snariady-ekspertrazpoziv-pro-obstrili-odesini-radanskimiraketi/ (accessed August 9 2022).

251. Horbatenko I. suspilne.media. In the evening of July 28, bombs were dropped on the outskirts of Mykolaiv. Three people were injured. 2022. https://suspilne.media/265623-vveceri-28-lipna-na-peredmista-mikolaeva-skinutil-bombu/ (accessed August 9 2022).

252. Telegram. Mykola Lukashuk - the head of the DOR: Russia's full-scale military invasion of Ukraine, 156 days, is coming to an end. 2022. https://t.me/mykola_lukashuk/844 (accessed August 9 2022).

253. Petrenko R. pravda.com.ua. The UN "with the permission of the parties" is ready to investigate the murder of prisoners in Elenovka. 2022. https://www.pravda.com.ua/rus/news/2022/07/30/7361080/ (accessed August 9 2022).

254. Telegram. Mykola Lukashuk - the head of the DOR: Russia's full-scale military invasion of Ukraine, 157 days, is coming to an end. 2022. https://t.me/mykola_lukashuk/848 (accessed August 9 2022).

255. Lutskyi P. ostannipodii.com. War in Ukraine. Operational information for the morning of July 31. 2022. https://ostannipodii.com/ru/a/202207/voyyna-v-ukraine-operativnaya-informatsiya-na-utro-31-iyulya-110026349/ (accessed August 9 2022).

256. Pavlova A, Abrashina K. vesti.ua. Chronology of the war in Ukraine: Tuesday, August 2. 2022. https://vesti.ua/strana/chronologiya-vojny-v-ukraine-vtorinik-2-avgusta-obnovlyaetsya (accessed August 9 2022).

257. Balachuk I, pravda.com.ua. The Russians fired missiles at Kharkov from Belgorod - the head of the OVA. 2022. https://www.pravda.com.ua/rus/news/2022/08/3/7361625/ (accessed August 9 2022).
References (Supplement)

1. Guha-Sapir D, Schlüter B, Rodriguez-Llanes JM, Lillywhite L, Hicks MH. Patterns of civilian and child deaths due to war-related violence in Syria: a comparative analysis from the Violation Documentation Center dataset, 2011-16. *The Lancet Global health* 2018; 6(1): e103-e10.

2. Hicks MH, Dardagan H, Guerrero Serdán G, Bagnall PM, Sloboda JA, Spagat M. Violent deaths of Iraqi civilians, 2003-2008: analysis by perpetrator, weapon, time, and location. *PLoS medicine* 2011; 8(2): e1000415.

3. Hicks MH, Dardagan H, Bagnall PM, Sloboda M, Sloboda JA. Casualties in civilians and coalition soldiers from suicide bombings in Iraq, 2003-10: a descriptive study. *Lancet* 2011; 378(9794): 906-14.

4. RadioFreeEurope RadioLiberty (RFE/RL). Zelenskiy Says More Than 130 Dead In Russian Invasion And That Ukraine Has Been 'Left Alone' To Fight. 2022. https://www.rferl.org/a/ukraine-deaths-fighting-people-flee/31721630.html (accessed April 18 2022).

5. UN News. Terrified families seek shelter underground in Ukraine capital. 2022. https://news.un.org/en/story/2022/02/1112732 (accessed April 18 2022).

6. reliefweb. Ukraine: Civilian casualties as of 24.00 27 February 2022 [EN/RU/UK]. 2022. https://reliefweb.int/report/ukraine/ukraine-civilian-casualties-2400-27-february-2022-enruuk (accessed April 18 2022).

7. reliefweb. Ukraine: Civilian casualties as of 24.00 28 February 2022 [EN/RU/UK]. 2022. https://reliefweb.int/report/ukraine/ukraine-civilian-casualties-2400-28-february-2022-enruuk (accessed April 18 2022).

8. Falconer R, Saric I. AXIOS. At least 352 civilian casualties in Ukraine, Ministry of Interior says. 2022. https://www.axios.com/un-civilians-killed-ukraine-casualties-russia-4eefc1dc-f444-4b84-91c4-f9175931b76f.html (accessed April 18 2022).

9. reliefweb. Ukraine Casualty Monitor: AOAV data on harm to civilians by explosive weapons. 2022. https://reliefweb.int/report/ukraine/ukraine-casualty-monitor-aov-data-harm-civilians-explosive-weapons (accessed April 18 2022).

10. Al Jazeera. Many deaths as Russia intensifies bombardment of Ukraine cities. 2022. https://www.aljazeera.com/news/2022/3/2/more-deaths-as-russia-intensifies-bombing-of-ukraine-cities (accessed April 18 2022).

11. reliefweb. Press briefing notes on Ukraine, 11 March 2022. 2022. https://reliefweb.int/report/ukraine/press-briefing-notes-ukraine-11-march-2022 (accessed April 18 2022).

12. Sangal A, Vogt A, Wagner M, et al. CNN. March 11, 2022 Russia-Ukraine news. 2022. https://www.cnn.com/europe/live-news/ukraine-russia-putin-news-03-11-22/dddfe1c3f63d1727a1f5539b193b1f7 (accessed April 18 2022).

13. BBC. Ukraine war: Three dead as maternity hospital hit by Russian air strike. 2022. https://www.bbc.com/news/world/europe-60675599 (accessed April 18 2022).

14. United Nations (UN). Ukraine: civilian casualty update 12 March 2022. 2022. https://www.ohchr.org/en/news/2022/03/ukraine-civilian-casualty-update-12-march-2022 (accessed April 18 2022).

15. Al Jazeera. Russia strikes Ukraine army base near Poland as it widens attacks. 2022. https://www.aljazeera.com/news/2022/3/13/russia-air-strikes-hit-ukraine-military-base-near-poland (accessed April 18 2022).

16. United Nations (UN). Ukraine: civilian casualty update 25 March 2022. 2022. https://www.ohchr.org/en/news/2022/03/ukraine-civilian-casualty-update-25-march-
World Health Organization (WHO). Surveillance system for attacks on health care (SSA). https://extranet.who.int/ssa/Index.aspx (accessed June 27 2022).

Reuters. Ukrainian civilian death toll reaches 1,119, U.N. says. 2022. https://www.reuters.com/world/europe/ukrainian-civilian-death-toll-reaches-1119-un-2022-03-27/ (accessed April 18 2022).

United Nations (UN). Ukraine: civilian casualty update 28 March 2022. 2022. https://www.ohchr.org/en/news/2022/03/ukraine-civilian-casualty-update-28-march-2022#:~:text=OHCHR%20notes%20the%20report%20of,been%20killed%20and%20216%20injured. (accessed April 18 2022).

United Nations (UN). Ukraine: civilian casualty update 10 April 2022. 2022. https://www.ohchr.org/en/news/2022/04/ukraine-civilian-casualty-update-10-april-2022 (accessed April 18 2022).

Ukrinform. Russian army kills 139 children in Ukraine since war-start. Available at: [https://www.ukrinform.net/rubric-ato/3441015-russian-army-kills-139-children-in-ukraine-since-warstart.html], last accessed 03.31.2022. 2022.

UN. Ukraine: civilian casualty update. Available at: [https://www.ohchr.org/en/news/2022/03/ukraine-civilian-casualty-update-29-march-2022], last accessed 03.31.2022. 2022.

Al Jazeera. Kramatorsk train station attack: Dozens killed, Ukraine says. 2022. https://www.aljazeera.com/news/2022/4/8/kramatorsk-train-station-attack-dozens-killed-ukraine-says (accessed April 18 2022).

BBC. Europe's largest nuclear plant shelled in Ukraine. 2022. https://www.bbc.com/news/av/world-60613863 (accessed April 18 2022).

Ray S. Forbes. Russian Shelling On Chemical Plant Caused Ammonia Gas Leak, Sumy Governor Says. 2022. https://www.forbes.com/sites/siladityaray/2022/03/21/russian-shelling-on-chemical-plant-caused-ammonia-gas-leak-sumy-governor-says/?sh=29c82e23d425 (accessed April 18 2022).

Lister T, Pennington J, McGee L., Gigova R. CNN. 'A family died... in front of my eyes': Civilians killed as Russian military strike hits evacuation route in Kyiv suburb. 2022. https://www.cnn.com/2022/03/06/europe/ukraine-russia-invasion-sunday-intl-hnk/index.html (accessed April 18 2022).

censor.net. The overwhelming forces of the enemy were stopped at the border of the river Teteriv in Kyiv region. The bridge was destroyed to block the way for Russian tanks - Land Forces. PHOTO REPORT. 2022. https://censor.net.ua/news/3319032/perevajayuchi_syly_voroga_zupyneno_na_rubeji_richky_teteriv_na_kyyivschnyi_mist_zruyinovano_schob_perekryty (accessed April 18 2022).

BBC. Russian forces seize Chernobyl nuclear power plant. 2022. https://www.bbc.com/news/world-us-canada-60514228 (accessed April 18 2022).

Zadorozhnyy P, Kesaieva Y, Tawfeeq M, Federico-O'Murchú S, Renton A, Qiblawi T. CNN. Russia has attacked Lviv. Here's why the western city is so important to Ukraine's defense. 2022. https://edition.cnn.com/2022/03/18/europe/lviv-ukraine-attack-russia-importance-intl/index.html (accessed April 18 2022).

Sangal A, Macaya M, Said-Moorhouse L, et al. CNN. April 4, 2022 Russia-Ukraine news. 2022. https://edition.cnn.com/europe/live-news/ukraine-russia-putin-news-04-04-22/index.html (accessed April 18 2022).
31. Hollingsworth J, Berlinger J, Haq SN, et al. CNN. Russia invades Ukraine. 2022. https://edition.cnn.com/europe/live-news/ukraine-russia-putin-news-04-2-22/h_ae7d266687efb4d640efbee551051e9 (accessed April 18 2022).

32. BBC. Ukraine nuclear plant: Russia in control after shelling. 2022. https://www.bbc.com/news/world-europe-60613438 (accessed April 18 2022).

33. Stasiuk I. Skyscraper. Russians bomb the Museum of Antiquities in Chernihiv (photo). 2022. https://hmarochos.kiev.ua/2022/03/11/rosiyany-rozbombyly-muzey-starozhytnostej-u-chernigovi-foto/ (accessed April 18 2022).

34. Commissioner for Human Rights of the Verkhovna Rada of Ukraine. Commissioner: aggressor continues to launch missile strikes on Ukraine - civilian airport in Vinnytsia destroyed. 2022. https://ombudsman.gov.ua/news_details/upovnovazhenij-agresor-prodovzhyue-zavadavati-raketnih-udariv-po-ukrayini-znishcheno-civilnij-aeroport-u-m-vinnicya (accessed April 18 2022).

35. Commissioner for Human Rights of the Verkhovna Rada of Ukraine. Commissioner: Rashists' actions at Ukraine's nuclear facilities threaten environmental catastrophe for the entire Eastern European region. 2022. https://ombudsman.gov.ua/news_details/upovnovazhenij-diyi-rashistiv-na-yadernih-obyektah-ukrayini-zagrozhyuyut-ekologichnoyukatastrofoyuvsomu-shidnoyevropejskomu-regionu (accessed April 18 2022).

36. Commissioner for Human Rights of the Verkhovna Rada of Ukraine. Commissioner: Rashist forces continue to kill peaceful Ukrainians with massive rocket attacks and artillery shelling. 2022. https://ombudsman.gov.ua/news_details/upovnovazhenij-masovimi-raketnymi-udarami-ta-artillerijskimi-obstrilami-rashistski-viiska-prodovzhyut-vbivati-mirnih-ukrayinciv (accessed April 18 2022).

37. Prischepa Y. suspline.media. Japan will hand over chemical protection suits and drones to Ukraine. 2022. https://suspline.media/230154-aponia-peredast-ukraini-kostumi-himzahistu-i-droni/ (accessed April 18 2022).

38. Office of the Prosecutor General. Air strikes at Dnipro airport - investigation launched. 2022. https://www.gp.gov.ua/ua/posts/aviaudari-po-aeroportu-m-dnipra-rozpoznavat-rozsliduvannya (accessed April 18 2022).

39. Office of the Prosecutor General. Capture and hijacking of 5 Ukrainian ships from the seaport of Berdyansk - proceedings have been initiated. 2022. https://www.gp.gov.ua/ua/posts/zaoplennya-ta-ugon-5-ukrayinskix-korabliv-z-morskogo-portu-berdyanska-rozpoznavanye-provadzennya (accessed April 18 2022).

40. March 22: The situation in the transport infrastructure at 20:00. 2022. https://www.kmu.gov.ua/news/22-bereznya-situaciya-v-transportnij-infrastrukturi-na-2000 (accessed April 18 2022).

41. March 23: The situation in the transport infrastructure as of 12:00. 2022. https://www.kmu.gov.ua/news/23-bereznya-situaciya-v-transportnij-infrastrukturi-na-1200 (accessed April 18 2022).

42. UKRAINE OUR HOUSE. Bridge destroyed in Troitsk, houses damaged (PHOTOS). 2022. https://kanaldom.tv/ukr/troitsk-ukrajina-zrjnovano-mist-postshkodzho-muzey-budynky-foto/ (accessed April 18 2022).

43. Museum of Ukrainian Painting. A museum with works by Maria Prymachenko was destroyed in Kyiv. 2022. https://museum.net.ua/news/na-ki%D1%97vshhini-zrujnovano-muzej-z-tvorami-mari%D1%97-primachenko (accessed April 18 2022).

44. nv.ua. Zhytomyr is cut off from Kyiv. A bridge on the highway was blown up near the parking lot. 2022. https://nv.ua/ukr/ukraina/events/viyna-rosii-proti-ukrainskih-pidirvali-mist-bilya-stoyanky-novini-kiyeva-5020226.html (accessed April 18 2022).
45. nv.ua. The biggest shelter. The occupying aircraft bombed the Drama Theater in Mariupol. 2022. https://nv.ua/ukr/ukraine/events/dramteatr-u-mariupoli-okupantskih-aviabombi-na-naybilshe-ukrittya-mirnih-zhiteleiv-50225646.html (accessed April 18 2022).

46. THE SUNDAY TIMES. Russia accused of using white phosphorus in Ukrainian city. 2022. https://www.thetimes.co.uk/article/president-biden-warns-putin-may-use-cyberattacks-and-chemical-weapons-vj83h6r3w (accessed April 18 2022).

47. Voice of America (VOA). Chernobyl, Zaporizhzhia Nuclear Plants Being Run by Ukrainian Staff, Russia Says. 2022. https://www.voanews.com/a/chernobyl-zaporizhzhia-nuclear-plants-being-run-by-ukrainian-staff-russia-says/6482346.html (accessed April 18 2022).

48. Transatlantic Dialogue Center (TDC). Destroyed cultural heritage. 2022. https://kompkd.rada.gov.ua/uploads/documents/34339.pdf (accessed April 18 2022).

49. Reuters. Ten Ukrainian hospitals destroyed since start of war, minister says. 2022. https://www.reuters.com/world/europe/ten-ukrainian-hospitals-destroyed-since-start-of-war-minister-says-2022-03-22/ (accessed April 18 2022).

50. Television news service (TCH). Residents of the city of Irpin in Kyiv region are forced to flee from the Russian occupiers through the destroyed bridge: photo. 2022. https://kyiv.tsn.ua/zhiteli-irpeni-na-kiyivscheni-tikayut-vid-rosiyskih-okupantov-cherez-zruynovaniy-mist-foto-1999063.html (accessed April 18 2022).

51. Ukrinform. Russian troops hit nitric acid tank in Rubizhne. 2022. https://www.ukrinform.net/rubric-ato/3449182-russian-troops-hit-nitric-acid-tank-in-rubizhne.html (accessed April 18 2022).

52. Orlova V. UNIAN. There is no more railway connection with the south, the bridge is destroyed - Zaporizhzhya Regional State Administration (photo). 2022. https://www.unian.ua/economics/transport/zaliznichnogo-spoluchennya-z-pivdennem-bilshe-nemaye-zruynovano-mist-zaporizka-oda-foto-novini-ukrajina-11724790.html (accessed April 18 2022).

53. ZAXID.NET. The Russians destroyed the museum with the originals of world-famous artists in Mariupol. 2022. https://zaxid.net/rosiyani_zruynuvali_muzey_z_originalami_vsesvitnoyidomih_hudozhnikiv_u_mariupoli_n1539309 (accessed April 18 2022).

54. Ministry of Health Ukraine. Viktor Lyashko: Russian troops fired on 135 hospitals, 9 of which were destroyed. 2022. https://moz.gov.ua/article/news/viktor-ljashko-rosijski-vijska-obstriljali-135-likaren-9-z-nih---znischeno-vschent (accessed April 18 2022).

55. Government services online. https://diia.gov.ua/ (accessed April 19 2022).

56. PBS NewsHour. Ukraine investigates claim that phosphorus munitions were dropped in Mariupol. 2022. https://www.pbs.org/newshour/world/ukraine-investigates-claim-that-phosphorus-munitions-were-dropped-in-mariupol (accessed April 18 2022).

57. Interfax-Ukraine. Farmak's losses due to a fire in a warehouse in the Kyiv region at the beginning of the war amounted to about UAH 1.5 billion. 2022. https://interfax.com.ua/news/pharmacy/816826-amp.html (accessed April 18 2022).

58. Kramer AE, Addario L. The New York Times Company. ‘He Is a Child of War’: Giving Birth Amid Chaos in Ukraine. 2022. https://www.nytimes.com/2022/04/07/world/europe/ukraine-mothers-birth.html (accessed April 18 2022).

59. Deutsche Welle (DW). Ukraine: Women in Kyiv forced to give birth in bomb shelters. 2022. https://www.dw.com/en/ukraine-women-in-kyiv-forced-to-give-birth-in-bomb-shelters/av-61111157 (accessed April 18 2022).
60. O’Grady S, Shefte W, Khudov K. The Washington Post. For these expecting mothers in Kyiv, night is passed in a maternity ward bunker. 2022. https://www.washingtonpost.com/world/2022/03/04/russia-putin-kyiv/ (accessed April 18 2022).

61. Public Health Center of the Ministry of Health of Ukraine. Weekly Public Health Risks Report: 14 Weeks of 2022 (April 4-10). 2022. https://www.phc.org.ua/sites/default/files/users/user90/risk_2022_14.pdf (accessed April 17 2022).

62. Public Health Center of the Ministry of Health of Ukraine. Weekly Public Health Risks Report: 13 Weeks of 2022 (March 28 - April 4). 2022. https://www.phc.org.ua/sites/default/files/users/user90/risk_2022_13.pdf (accessed April 17 2022).

63. Public Health Center of the Ministry of Health of Ukraine. Weekly Public Health Risks Report: 12 Weeks of 2022 (March 21-27). 2022. https://www.phc.org.ua/sites/default/files/users/user90/risk_2022_12.pdf (accessed April 17 2022).

64. Main Department of the State Food and Consumer Service in Rivne region. Botulism. 2022. https://www.rivneprod.gov.ua/2022/06/13/botulizm/ (accessed June 22 2022).

65. Public Health Center of the Ministry of Health of Ukraine. All-Ukrainian Poliomyelitis Vaccination Campaign: Results of the Third Week. 2022. https://phc.org.ua/news/vseukrainska-kampaniya-scheplennya-proti-poliomielitu-rezultati-tretogo-tizhnya (accessed April 17 2022).

66. Public Health Center of the Ministry of Health of Ukraine. HIV and TV Statistics in Ukraine: February 2022. 2022. https://phc.org.ua/news/statistika-vil-i-tb-v-ukraini-lyutyi-2022-roku (accessed April 17 2022).

67. Public Health Center of the Ministry of Health of Ukraine. HIV and TV Statistics in Ukraine: March 2022. 2022. https://phc.org.ua/news/statistika-vil-i-tb-v-ukraini-berezen-2022-roku (accessed April 17 2022).

68. Ministry of Finance. Coronavirus in Ukraine. 2022. https://index.minfin.com.ua/reference/coronavirus/ukraine/2022-02/ (accessed April 17 2022).

69. Cherkasy is bombing. There are automatic queues at the Customs. 2022. https://dzvin.media/news/cherkasy-bomblyat-lunayut-avtomatni-chergy-na-mytnyczi/ (accessed April 17 2022).

70. Word and Deed. The number of dead since the beginning of the war was announced in Chernihiv. 2022. https://www.slovoidilo.ua/2022/04/08/novyna/suspilstvo/chernihovi-o-ovylyiki-kilkist-zahyblyx-pochatu-vijny (accessed June 22 2022).

71. Word and Deed. In the Chernihiv region, the number of dead and wounded civilians was announced. 2022. https://www.slovoidilo.ua/2022/05/25/novyna/suspilstvo/chernihivshhnyi-nazvaly-kilkist-zahyblyx-ta-poranenys-myryan-zhyteliv (accessed June 22 2022).

72. The New York Times. Maps: Tracking the Russian Invasion of Ukraine. 2022. https://www.nytimes.com/interactive/2022/world/europe/ukraine-maps.html?auth=login-google1tap&login=google1tap (accessed April 14 2022).

73. UN Office for the Coordination of Humanitarian Affairs (OCHA). Ukraine: Humanitarian Impact Situation Report (As of 12:00 p.m. (EET) on 1 April 2022). 2022. https://reliefweb.int/report/ukraine/ukraine-humanitarian-impact-situation-report-1200-pm-eet-1-april-2022 (accessed April 1st 2022).
74. Chernish O. BBC. "This is the agony of the enemy." Will the Russians turn Chernihiv into a second Mariupol? 2022. https://www.bbc.com/ukrainian/news-60832398?xtor=AL-73-%5Bpartner%5D-%5Bukr%5D-%5Bheadline%5D-%5Bukrainian%5D-%5Bbizde v%5D-%5Bisapi%5D (accessed April 17 2022).

75. Ukrinform. The Russian military struck again at the airport in the Dnieper - it was completely destroyed. 2022. https://www.ukrinform.ua/rubric-ato/3453886-vijskovi-rf-znovu-vdarili-po-aeroportu-v-dnipri-vin-zrujnovanij-povnistu.html (accessed April 17 2022).

76. Sinegubov O. Head of the Kharkiv Regional State Administration: Briefly about the situation in Kharkiv region as of June 7. 2022. https://t.me/s/synegubov/3389 (accessed June 22 2022).

77. Wu J, Carman J, Einhorn E, Hersher M. NBC. Ukraine attacked: Map of sites targeted by Russia's invasion. 2022. https://www.nbcnews.com/specials/ukraine-attacked/sites-targeted-russia-invasion/index.html (accessed April 14 2022).

78. Deutsche Welle (DW). In Kharkiv, 4 people died in the morning shelling - SES. 2022. https://www.dw.com/uk/ssha-zakryvaiut-nebo-dlia-rosiiskykh-litakiv/a-60976986 (accessed April 17 2022).

79. Ukrainian energy (UE). Energy in martial law (updated). 2022. https://ua-energy.org/uk/posts/enerhetyka-v-umovakh-viiskovoho-stanu-onovliutesia (accessed April 4 2022).

80. Kharkiv Heat Networks continues to repair pipelines. 2022. https://www.city.kharkov.ua/uk/news/kharkivskii-teplomerezhi-prodovzhuyut-remont-truboprovodiv-50396.html (accessed April 17 2022).

81. In Kharkiv, six damages to water mains were repaired. 2022. https://www.city.kharkov.ua/uk/news/u-kharkovi-usunuli-shist-poshkodzhen-na-vodovodakh-50400.html (accessed April 17 2022).

82. Interfax-Ukraine. Mobile operators in Kharkiv, Melitopol, Chernihiv and Sumy restore infrastructure - State Special Communications. 2022. https://interfax.com.ua/news/general/811333.html (accessed April 4 2022).

83. Telegram. Operational information of the State Special Communications Service on the operation of mobile networks as of 09:00 on March 11, 2022. 2022. https://t.me/dsszzi_official/2182 (accessed April 4 2022).

84. Cave D, Isai V. The New York Times. The State of Fighting in Ukraine's Besieged Cities. 2022. https://www.nytimes.com/article/ukraine-cities.html (accessed April 14 2022).

85. DTEK returns electricity to 82,000 families left without electricity for the second time. 2022. https://www.dtek-kem.com.ua/ua/news/dtek-vdruge-povernuv-elektroenergiyu-dlya-82-000-sinevy-kiyevi-shcho-zalishyi-bez-svitla-cherez-boyovy-diiji (accessed April 4 2022).

86. Lysogol I. LB.ua. In Mariupol, 20,000 civilians were killed, after yesterday's air bombs on Azovstal the number of wounded exceeded 600. 2022. https://lb.ua/society/2022/04/29/515177_mariupoli_zaginulo_20_000_mirnih.html (accessed June 22 2022).

87. The UN has updated data on the victims of the Russian invasion of Ukraine. 2022. https://www.slovoidilo.ua/2022/06/01/novyna/susplstvo/oon-onovyla-dani-pro-zherty-rosijskoho-vtorhennia-ukrayini (accessed June 22 2022).

88. An extraordinary session of the Mariupol City Council took place. 2022. https://mariupolrada.gov.ua/news/vidbulasja-poazhertsgova-sesija-mariupolskoi-miskoi-radi (accessed April 4 2022).
89. Boyko I. The occupiers attacked Odessa from the air, the authorities gave advice to residents. 2022. https://www.unian.ua/war/viyna-v-ukrajini-2022-okupanti-vidznachilisya-v-odesi-zhitelyam-dali-poradi-foto-novini-odesi-11770825.html (accessed April 17 2022).

90. Word and Deed. In the Sumy region, the number of civilians killed in the war was announced. 2022. https://www.slovoidilo.ua/2022/04/09/novyna/suspilstvo/sumshhyni-ozvuchyly-kilkist-zahyblyx-myrnyx-zhyteliv-cherez-vijnu (accessed June 22 2022).

91. Wikipedia. God of Sum (2022). 2022. https://uk.wikipedia.org/wiki/%D0%91%D0%BE%D1%97_%D0%B7%D0%B0%D0%A1%D1%83%D0%BC%D0%B8 (accessed April 17 2022).

92. Ukrinform. In Ukraine, 115 health care facilities were completely destroyed as a result of the Russian aggression. 2022. https://www.ukrinform.ua/rubric-society/3503501-v-ukrainskii-vnaslidok-agresii-efektivno-zagidnuli-v-115-zakladiv-teritorialnoho-zdorovia.html (accessed June 22 2022).

93. Chernihiv Regional State Administration. Road workers of Chernihiv region eliminate the consequences of hostilities and provide travel to the region. 2022. https://www.cg.gov.ua/index.php?id=452902&tp=page (accessed April 18 2022).

94. Ukrinform. Invaders of the Russian Federation fired at Chernihiv with cruise missiles. 2022. https://www.ukrinform.ua/rubric-ato/3417991-rosijski-zagarbniki-obstrili-budivli-policii-ta-likarinu-u-cernigovi.html (accessed April 18 2022).

95. Ukrinform. Russian troops fired on the center of Chernihiv - damaged clinics and homes. 2022. https://www.ukrinform.ua/rubric-ato/3414868-viyska-efektivno-zagidnuli-centry-teritorialnoho-zdorovia-poskodili-bagativyi-blok.html (accessed April 18 2022).

96. helsinki.org. Chronology of events in Kharkiv and Kharkiv region during the Russian-Ukrainian war. April 5, 2022. 2022. https://helsinki.org.ua/articles/khronolohiia-podiy-u-kharkovi-ta-kharkivskiy-oblast-pid-chas-rosiysko-ukrainskoj-viyny-5-kvitnia-2022-roku/ (accessed April 18 2022).

97. They searched the hospital, church, houses and enterprises - the consequences of the shelling of Dergachi. 2022. https://suspline.media/226557-gatili-po-likarni-fevralya-2022-snaryad-vluchiv-u-centru-reabilitacii-ditey-2004988.html (accessed April 18 2022).

98. ATN. A hospital and a medical center were shelled in Dergachi. 2022. https://atn.ua/kharkiv/v-derhachakh-obstrili-likarniu-ta-tsentr-meddopomohy-368789/ (accessed April 18 2022).

99. Reed J. BBC. Ukraine war: WHO says attacks on health facilities are rising daily. 2022. https://www.bbc.com/news/health-60866669 (accessed April 17 2022).

100. KharkivToday (KT). A children's hospital and the Blood Service were shelled in Kharkiv. 2022. https://2day.kh.ua/ua/kharkow/u-kharkovi-obstrilyaly-dytyachu-likarnyu-ta-sluzhbu-krovi (accessed April 17 2022).

101. Novyny.live. The Russians fired on a children's rehabilitation center in the Kherson region. Photo. 2022. https://novyny.live/safety/frossiian-obstrili-likarni-dytyachiy-teritoriialnoho-zdorovia-42358.html (accessed April 18 2022).

102. Television news service (TCH). The Russian army fired at the village in the Kherson area: the shell hit the children's rehabilitation center. 2022. https://tsn.ua/ato/rosiyska-armiya-obstrilyala-selo-v-heronskii-oblasti-snaryad-vluchiv-u-centru-reabilitaciyy-ditiei-2004988.html (accessed April 18 2022).

103. Komissarov A. The shelling in Kyiv. The Okhmatdyt doctor spoke about the condition of the injured child. 2022. https://suspline.media/211628-obstrili-u-kievi-likar-okhmatdytu-razpolov-v-pro-stan-poraneni-ditini/ (accessed April 17 2022).
104. Khlebnikov V. BIG KYIV. A medical center with seriously ill patients suffered from the shelling of the occupiers in Kyiv. 2022. https://bigkyiv.com.ua/vid-obstriliv-okupantiv-v-kyivyi-postrazhdav-medcentr-z-tyazhkhovorymy-pacziyantamy/ (accessed April 17 2022).

105. Television news service (TCH). In the Kyiv region, the Russian occupiers fired on a maternity hospital and a rehabilitation center. 2022. https://kyiv.tsn.ua/u-kiyivskiy-oblasti-rosiyski-okupanti-obstrilyali-pologoviy-budinok-ta-reabilitaciyniy-centr-1992757.html (accessed April 17 2022).

106. KyivGovernment. In Makarov, Kyiv region, the occupiers shot at Hurricanes medical center, kindergarten and houses. 2022. https://kievvlast.com.ua/news/v-makarovi-nakrivshhini-okupanti-rozstrilyali-uraganami-medyczni-tsentr-sadochok-ta-budinki (accessed April 18 2022).

107. Ukraine war: Three dead as maternity hospital hit by Russian air strike. 2022. https://www.bbc.com/news/world/europe-60675599 (accessed April 17 2022).

108. Boyko I. Unian. Russian occupiers shelling hospital in Mariupol, 400 people held hostage. 2022. https://www.unian.ua/war/rosiyani-vedut-obstril-iz-likarni-v-mariupoli-400-lyudey-u-zaruchnikah-novini-vtorgnennya-rosiji-v-ukrajinu-11745916.html (accessed April 18 2022).

109. nv.ua. Burning houses in Kyiv region and destruction in Mariupol. Maxar showed new satellite images of Ukraine. 2022. https://nv.ua/ukr/world/countries/viyni-v-ukrajini-maxar-pokazala-novi-znimki-poshodzhen-u-mariupoli-foto-50225080.html (accessed April 18 2022).

110. Balachuk I. Ukrainian Pravda. The occupiers took hostage a hospital in Mariupol - the head of the region. 2022. https://www.pravda.com.ua/news/2022/03/15/7331610/ (accessed April 18 2022).

111. Petrenko R. Ukrainian Pravda. Occupiers specially bomb the building with a red cross in Mariupol - "Azov". 2022. https://www.pravda.com.ua/news/2022/03/30/7335738/ (accessed April 17 2022).

112. Ukrinform. The occupiers fired on the oncology center in Melitopol. 2022. https://www.ukrinform.ua/rubric-ato/3413016-okupanti-obstrilali-onkodispanser-u-melitopoli.html (accessed April 17 2022).

113. Television news service (TCH). The oncology hospital in Nikolaev came under attack of occupiers: a photo and video of consequences. 2022. https://tsn.ua/ato/pid-obstril-okupantiv-potravila-onkologichna-likarnya-u-nikolayevi-photo-i-video-nasilkiv-2006536.html (accessed April 17 2022).

114. Ukrinform. The invaders destroyed a hospital in Rubizhne and blame the Armed Forces for this. 2022. https://www.ukrinform.ua/rubric-ato/3451307-zagarbniki-zrujnuvali-likarnu-u-rubizhnomu-i-zvinuvacu-vozduh-v-ukrajini-foto-1417592.html (accessed April 17 2022).

115. Ukrinform. In Severodonetsk, the invaders fired on the regional hospital. 2022. https://www.ukrinform.ua/rubric-regions/3432879-u-severodonecku-zagarbniki-obstrilali-oblasnu-likarnu.html (accessed April 17 2022).

116. Duck P. VOICE. Rashists opened fire on a children's hospital in Severodonetsk (photo). 2022. https://vgolos.ua/news/rashisti-vidkrili-vogon-po-dityachyi-likarni-u-sievierodorenecku-foto_1417592.html (accessed April 17 2022).

117. The Russian military fired on the hospital in Vasylivka: there are casualties. 2022. https://susipline.media/213421-vijskovi-rf-obstrilali-likarnu-u-vasilivci-e-zagibli/ (accessed April 17 2022).
118. Stepura A. suspilne.media. Wave for the second day under fire: no light, gas, food, people in the basement. 2022. https://suspilne.media/211772-volnovaha-drugu-dobu-obstrilami-nema-svitla-gazu-izi-ludi-po-pidvalah/ (accessed April 18 2022).

119. Ukraine: Russian Cluster Munition Hits Hospital. 2022. https://www.hrw.org/news/2022/02/25/ukraine-russian-cluster-munition-hits-hospital# (accessed April 17 2022).

120. Roschina O. Ukrainian Pravda. The occupiers hit a hospital in Vugledar: 4 dead and 10 wounded. 2022. https://www.pravda.com.ua/news/2022/02/24/7325441/ (accessed April 17 2022).

121. RBC-Ukraine. Russian aircraft attacked Zhytomyr city hospital. The city will turn off the lights at night - Sukhomlin. 2022. https://www.rbc.ua/ukr/news/rossiyskaya-aviatsiya-atakovala-gorodskuy-1646859693.html (accessed April 17 2022).

122. Gamalii I. LB.ua. About 40 Ukrainian prisoners were killed in an attack by the occupiers on Olenivka, - Prosecutor General's Office. 2022. https://lb.ua/society/2022/07/29/524713_vid_udaru_okupantiv_olenivtsi.html (accessed August 8 2022).

123. Amnesty International. Russian military commits indiscriminate attacks during the invasion of Ukraine. 2022. https://www.amnesty.org/en/latest/news/2022/02/russian-military-commits-indiscriminate-attacks-during-the-invasion-of-ukraine/ (accessed June 27 2022).

124. Amnesty International. Ukraine: Russia’s cruel siege warfare tactics unlawfully killing civilians – new testimony and investigation. 2022. https://www.amnesty.org/en/latest/news/2022/04/ukraine-russias-cruel-siege-warfare-tactics-unlawfully-killing-civilians-new-testimony-and-investigation/ (accessed June 27 2022).

125. Amnesty International. RUSSIA’S WAR ON UKRAINE: All the latest news and updates. 2022. https://www.amnesty.org/en/latest/news/2022/03/latest-news-on-russias-war-on-ukraine/ (accessed June 27 2022).

126. Amnesty International. Ukraine: Russian forces must face justice for war crimes in Kyiv oblast. 2022. https://www.amnesty.org/en/latest/news/2022/05/ukraine-russian-forces-must-face-justice-for-war-crimes-in-kyiv-oblast-new-investigation/ (accessed June 27 2022).

127. Amnesty International. “ANYONE CAN DIE AT ANY TIME”: Indiscriminate attacks by Russian forces in Kharkiv, Ukraine. 2022. https://www.amnesty.org/en/latest/research/2022/06/anyone-can-die-at-any-time-kharkiv/ (accessed June 27 2022).

128. Amnesty International. Ukraine: hundreds killed in relentless Russian shelling of Kharkiv. 2022. https://www.amnesty.org/en/latest/news/2022/06/ukraine-hundreds-killed-in-re lentless-russian-shelling-of-kharkiv-new-investigation/ (accessed June 27 2022).

129. Action on Armed Violence (AOAV). Ukraine: AOAV explosive violence data on harm to civilians. 2022. https://aoav.org.uk/2022/ukraine-casualty-monitor/ (accessed June 27 2022).

130. United Nations. Ukraine: Civilian casualties. 2022. https://ukraine.un.org/en/resources/publications (accessed June 27 2022).

131. Mirny M, Shevchik O. ZMINA. Losses among civilians and facilities from the Russian invasion (updated). 2022. https://zmina.info/articles/vtraty-sered-czyvilnyh-gromadyan-ta-obyektiv-vid-vtorgnennya-rosiyi-onovlyuyetsya/ (accessed April 18 2022).
132. Zubar D. suspilne.media. 21 dead and 39 people in the hospital: what is known about the tragedy in Serhiivka, Odesa region. VIDEO. 2022. https://suspilne.media/256029-najbilsa-kilkist-zagiblih-vid-pocatku-vtorgnenna-so-vidomov-pro-tragediu-v-sergiivci-odeskoi-oblasti-video/ (accessed August 8 2022).

133. rayon.in.ua. The situation regarding the Russian invasion of Ukraine on July 7. 2022. https://rayon.in.ua/news/527821-situatsiya-shchodo-rosiyskogo-vtorgnennya-v-ukrainu-7-lipnya (accessed August 4 2022).

134. LB.ua. Goal for the night. Friday, July 8: the enemy's offensive in Donetsk region, shelling of Chernihiv region and Kharkiv, an attempt on the ex-prime minister of Japan, a fence on the Finnish border. 2022. https://lb.ua/society/2022/07/08/522542_golovne_nich_pyatnitsya_8_lipnya.html (accessed August 8 2022).

135. Tyshenko K. pravda.com.ua. In Donetsk region, the Russians killed 3 more and injured 23 people. 2022. https://www.pravda.com.ua/news/2022/07/9/7357264/ (accessed August 8 2022).

136. suspilne.media. Russia's invasion of Ukraine, day 139. 2022. https://suspilne.media/259499-vtorgnenna-rosii-v-ukrainu-den-139-tekstovij-onlajn/ (accessed August 8 2022).

137. Lysohor I. In the morning, the enemy fired at a kindergarten in Toretsk and launched a massive rocket attack on Mykolaiv, - OVA. 2022. https://lb.ua/society/2022/07/12/522881_urantsi_vorog_obstrilyav_ditsadok.html (accessed August 8 2022).

138. LB.ua. The main thing for the day. Wednesday, July 13. 2022. https://lb.ua/society/2022/07/13/523089_golovne_den_sereda_13_lipnya.html (accessed August 8 2022).

139. Kovalevska E. BBC. Russia's largest strikes on civilian objects in Ukraine, which killed hundreds of people. 2022. https://www.bbc.com/ukrainian/news-62150693 (accessed August 8 2022).

140. Podhola J. suspilne.media. The Russian army launched missile strikes on the Dnipro, killing three people and wounding 15. What is known. 2022. https://suspilne.media/261066-u-dnipri-prolunala-seria-vibuhiv-so-vidomo/ (accessed August 8 2022).

141. suspilne.media. Russia's invasion of Ukraine, day 137. 2022. https://suspilne.media/258934-vtorgnenna-rosii-v-ukrainu-den-137-tekstovij-onlajn/ (accessed August 8 2022).

142. Interfax-Ukraine. Last day, three residents of Donetsk region were killed and twelve were wounded as a result of shelling. 2022. https://ua.interfax.com.ua/news/general/846487.html (accessed August 8 2022).

143. Ukrinform. The Russians killed two civilians of Donetsk region yesterday, another 10 were injured. 2022. https://www.ukrinform.ua/rubric-ato/3531355-rosiani-minuloi-dobi-vbili-dvoh-mirnih-ziteliv-doneckoi-oblasti-se-10-poraneni.html (accessed August 8 2022).

144. rayon.in.ua. The situation regarding the Russian invasion of Ukraine on July 18. 2022. https://rayon.in.ua/news/530059-situatsiya-shchodo-rosiyskogo-vtorgnennya-v-ukrainu-18-lipnya (accessed August 8 2022).

145. espreso.tv. In Donetsk region, the Russians killed 5 civilians and wounded 16 more in a day. 2022. https://espreso.tv/na-donechchini-rosiyani-za-dobu-vbili-5-tsivilnikh-i-poranili-shche-16 (accessed August 8 2022).
146. ZMINA. The Russians shelled the Zaporizhzhia region: one person was killed and three were wounded. 2022. https://zmina.info/news/roisyany-obstrilyaly-zaporizku-oblast-zagynula-odna-lyudyna-troye-poraneni/ (accessed August 8 2022).

147. Interfax-Ukraine. In Donetsk region, the Russians killed five civilians and injured ten more. 2022. https://ua.interfax.com.ua/news/general/847736.html (accessed August 8 2022).

148. Mazurenko A. pravda.com.ua. Donetsk region: 9 wounded per day from Russian shelling. 2022. https://www.pravda.com.ua/news/2022/07/23/7359734/ (accessed August 8 2022).

149. LB.ua. The main thing for the day. Saturday, July 23. 2022. https://lb.ua/society/2022/07/23/524099_golovne_den_subota_23_lipnya.html (accessed August 8 2022).

150. suspilne.media. On July 24, 8 people were injured in Donetsk region as a result of the Russian invasion of Ukraine. 2022. https://suspilne.media/264027-na-doneckom-sfere-otstril-i-artillerynye-stroki-8-specnazovskikh-voenno-voennikh-forumov-v-zaporizhzhii/ (accessed August 8 2022).

151. Romanenko V. pravda.com.ua. Russians are killing Donetsk residents: 3 people were killed and 8 were wounded in a day. 2022. https://www.pravda.com.ua/news/2022/07/26/7360187/ (accessed August 9 2022).

152. Interfax-Ukraine. Yesterday, as a result of shelling in the Donetsk region, one person was killed and one was injured. 2022. https://interfax.com.ua/news/general/848729.html (accessed August 9 2022).

153. Interfax-Ukraine. The number of victims of the shelling of Bakhmut increased to three, and three were injured. 2022. https://ua.interfax.com.ua/news/general/849176.html (accessed August 9 2022).

154. Interfax-Ukraine. Yesterday, 8 people were killed and 19 were injured as a result of shelling in the Donetsk region. 2022. https://ua.interfax.com.ua/news/general/849221.html (accessed August 9 2022).

155. Television news service (TCH). Shelling of Chernihiv region and artillery strikes in Donetsk region: what is the situation in the regions on July 30. 2022. https://tsn.ua/ato/obstrili-chernigivschini-ta-artilleriyski-udari-na-donechchini-yaka-situacia-i-situatsiya-v-regiyakh-30-lipnya-2122594.html (accessed August 9 2022).

156. Action on Armed Violence (AOAV). Ukraine: AOAV explosive violence data on harm to civilians. 2022. https://aoav.org.uk/2022/ukraine-casualty-monitor/ (accessed August 9 2022).

157. Public Health Center of the Ministry of Health of Ukraine. Second case of poliomyelitis confirmed in Ukraine: in a two-year-old boy 2022. https://phc.org.ua/news/v-ukraini-pidtverdzheno-drugi-vipadok-poliomielitu-u-dvorichnogo-kluchchika (accessed August 9 2022).

158. pravda.com.ua. “Ruble occupation” of the south of Ukraine. 54th day of the war. ONLINE. 2022. https://www.pravda.com.ua/rus/articles/2022/04/18/7340321/ (accessed June 27 2022).

159. pravda.com.ua. War. Day 59. ONLINE. 2022. https://www.pravda.com.ua/rus/articles/2022/04/23/7341513/ (accessed June 27 2022).

160. Alena M. pravda.com.ua. In the Donetsk region, the Russians shelled a village: 30 houses were damaged. 2022. https://www.pravda.com.ua/rus/news/2022/04/11/7338908/ (accessed June 27 2022).
161. Karlovskii D. pravda.com.ua. Luhansk region: as a result of the shelling of Russian invaders in Novodruzhesk, a man died. 2022. https://www.pravda.com.ua/rus/news/2022/04/12/7339138/ (accessed June 27 2022).

162. pravda.com.ua. Azov - steel. 57th day of the war with Russia. ONLINE. 2022. https://www.pravda.com.ua/rus/articles/2022/04/21/7341048/ (accessed June 27 2022).

163. Aussiedlerbote. War in Ukraine on March 26. 2022. https://aussiedlerbote.de/2022/03/vojna-v-ukraine-26-marta/ (accessed June 27 2022).

164. nv.ua. Missile attack on Lutsk: the missile was fired from the territory of Belarus - the head of the Regional State Administration. 2022. https://nv.ua/ukraine/events/raketa-na-volyni-priletela-iz-belarusi-novosti-ukrainskij-50228850.html (accessed June 27 2022).

165. Apostrophe. AFU liberated an important city near Kyiv, the occupier launched a missile attack on the Rivne region: a chronicle of the events of the war on March 28. 2022. https://apostrophe.ua/news/society/2022-03-29/tyajelyie-boi-pod-izyumom-i-mariupolem-onlayn-sobytiy-voynyi-28-marta-264130 (accessed June 27 2022).

166. nv.ua. 34th day of the war - chronicle. Under the rubble of the Nikolaev Regional State Administration, 12 bodies were found, the number of people who left Ukraine reached 4 million people. 2022. https://nv.ua/ukraine/events/voyna-v-ukraine-29-marta-hod-peregovorov-segodnya-glavnye-sobytiy-i-poteri-rf-novosti-ukrainskij-50229189.html (accessed June 27 2022).

167. Serebryanaya O. Currenttime. March 30. Russia always fights like this. 2022. https://www.currenttime.tv/a/semsorok-russia-has-always-fought-like-that/31777195.html (accessed June 27 2022).

168. Aussiedlerbote. War in Ukraine April 2. 2022. https://aussiedlerbote.de/2022/04/vojna-v-ukraine-2-atryela/ (accessed June 27 2022).

169. nv.ua. 39th day of the war - results. Ukraine and the world are shocked by the monstrous crimes of the Russian military in Bucha 2022. https://nv.ua/ukraine/events/voyna-v-ukraine-situaciya-pod-kievom-segodnya-glavnye-sobytiy-boi-novosti-ukrainskij-50230620.html (accessed June 27 2022).

170. pravda.com.ua. Kharkiv region: Russians killed 10 civilians in a day, including a child. 2022. https://www.pravda.com.ua/rus/news/2022/04/10/7338679/ (accessed June 27 2022).

171. Nechiporenko M. thepage.ua. Operational information about the Russian-Ukrainian war at 18:00 April 5, 2022. 2022. https://thepage.ua/news/operativnaya-informaciya-o-rossijsko-ukrainskom-vojne-5042022 (accessed June 27 2022).

172. Telegram. Zaporizhia Regional Military Administration: Enemy shelling continues to destroy utility networks. 2022. https://t.me/zoda_gov_ua/8711 (accessed August 9 2022).

173. Bogdanok O. suspilne.media. Shelling of Dnipropetrovsk region, Sumy region, Mykolaiv region, battles in Donbas. How was the night in the regions. 2022. https://suspilne.media/247406-obstrili-dnipropetrovski-sumsini-mikolaivsini-boi-nadobasi-ak-minula-nic-u-regionah/ (accessed August 9 2022).

174. 24tv.ua. The explosion in Kherson and the terrible rocket attacks of Mykolaiv region: the main points of the 104th day of the war. 2022. https://24tv.ua/ru/104-den-voyny-v-ukraine-07-06-2022-novosti-za-sutki_n1996884 (accessed August 9 2022).

175. Ryazantseva A, Mavrychev V. suspilne.media. A Russian rocket destroyed a supermarket in Kharkiv: photo. 2022. https://suspilne.media/247820-rosijska-raketa-zrujnuvala-supermarket-u-harkovi-foto/ (accessed August 9 2022).
176. Telegram. Evgeny Sytnychenko / Kryvorizky district. 2022. https://t.me/evgendoberman/237 (accessed August 9 2022).

177. skeptik.com.ua. War in Ukraine June 9, 2022 — news, online, summary today. 2022. https://skeptik.com.ua/voina-v-ykraine-9-iunia-2022-novosti-onlain-svodka-segodnia/ (accessed August 9 2022).

178. Telegram. Dmytro Zhivytsky / Sumy OVA: The situation as of 22:00 June 10, 2022. 2022. https://t.me/Zhyvytskyy/2528 (accessed August 9 2022).

179. Pomydorov I, Abrashina K. vesti.ua. Chronology of the war in Ukraine: Friday, June 10. 2022. https://vesti.ua/strana/hronologiya-vojny-v-ukraine-pyatnitsa-10-iunya-obnovlyaetsya (accessed August 9 2022).

180. Solodovnik M, Hnatiuk I. suspilne.media. Two people died during the shelling of Zolochev in the Kharkiv region on June 11. 2022. https://suspilne.media/249240-dvoe-ludej-zaginuli-pid-cas-obstrilu-zoloceva-na-harkivsini-11-cervna/ (accessed August 9 2022).

181. Balachuk I. pravda.com.ua. Donetsk region: the occupiers inflicted 16 blows, including casualties. 2022. https://www.pravda.com.ua/rus/news/2022/06/11/7351894/ (accessed August 9 2022).

182. suspilne.media. News for June 12, 2022. 2022. https://suspilne.media/archive/2022/6/12/ (accessed August 9 2022).

183. Lubenets G. telegraf.com.ua. War - day 109: the Armed Forces of Ukraine advance to the south of Ukraine, and Russia prepares for a long war. 2022. https://telegraf.com.ua/ukraina/2022-06-12/5707579-viyna-den-109-zsu-nastupayut-na-pivdni-ukrainska-rosiya-gotuetsya-do-trivaloi-viyni (accessed August 9 2022).

184. Telegram. Dmytro Zhivytsky / Sumy OVA: The situation as of 21:30 June 13, 2022. 2022. https://t.me/Zhyvytskyy/2550 (accessed August 9 2022).

185. Kornilov M. telegraf.com.ua. The war is day 110: the invaders continue to advance on Donbas, depleting their army. 2022. https://telegraf.com.ua/ukraina/2022-06-13/5707660-viyna-den-110-okkupanty-prodolzhayut-nastupat-na-donbasse-istoshchaya-svoyu-armiyu (accessed August 9 2022).

186. suspilne.media. News for June 14, 2022. 2022. https://suspilne.media/archive/2022/6/14/ (accessed August 9 2022).

187. suspilne.media. News for June 15, 2022. 2022. https://suspilne.media/archive/2022/6/15/ (accessed August 9 2022).

188. 24tv.ua. Biden announced a new package of military aid, the "Ramstein-3" meeting: the main thing for the 112th day of the war. 2022. https://24tv.ua/ru/112-den-vojny-v-ukraine-15-06-2022-novosti-za-sutki_n2020575 (accessed August 9 2022).

189. Telegram. Pavlo Kyrylenko / Donetsk State Administration (OVA): Russia kills civilians! (for June 16). 2022. https://t.me/pavlokrylyenko_donoda/3704 (accessed August 9 2022).

190. dw.com. UN: 4,481 civilians have died in Ukraine since the beginning of the military aggression of the Russian Federation. 2022. https://www.dw.com/ru/vojna-ukraina-rossijaj-16-iunja-2/a-62147540 (accessed August 9 2022).

191. Petrenko R. pravda.com.ua. Russians hit Nikolaev with a rocket: 2 dead and 20 wounded. 2022. https://www.pravda.com.ua/ru/news/2022/06/17/7352992/ (accessed August 9 2022).

192. Ganyukova O. war.obozrevatel.com. The occupiers staged a new shelling of Kharkov, the launch of rockets was recorded in Belgorod. 2022. https://war.obozrevatel.com/okkupanti-ustroili-novyij-obstrel-harkova-zapusk-raket-zafiksirovali-v-belgorode-video.htm (accessed August 9 2022).
193. Lubenets G. telegraf.com.ua. War - day 116: the occupiers have withdrawn reserves to Luhansk region and are preparing to attack. 2022. https://telegraf.com.ua/ukraina/2022-06-19/5708185-viyna-den-116-okupantsy-stvagnuli-rezervi-na-luganshchinu-i-gotuyutsya-do-nastupu (accessed August 9 2022).

194. Apostrophe. The failure of the enemy's offensive in the east and the strikes of the Armed Forces of Ukraine in the south of Ukraine: the chronicle of the war on June 20. 2022. https://apostrophe.ua/news/politics/2022-06-20/proval-nastupleniya-vraga-na-vostoke-i-udaryi-vsu-na-yuge-ukrainyi-onlayn-voynyi-20-iyunya/272261 (accessed August 9 2022).

195. Telegram. Dmytro Zhivtsky / Sumy OVA: The situation as of 22:00 June 21, 2022. https://t.me/Zhyvytskyy/2725 (accessed August 9 2022).

196. Balachuk I, Tyshchenko K. pravda.com.ua. Hit on the metro facility in Kharkiv: an employee was injured, the trains were damaged. 2022. https://www.pravda.com.ua/rus/news/2022/06/21/7353791/ (accessed August 9 2022).

197. Telegram. Pavlo Kyrylenko / Donetsk State Administration (OVA): Russia kills civilians! (for June 20). 2022. https://t.me/pavlokrylenko_donoda/3724 (accessed August 9 2022).

198. Telegram. Pavlo Kyrylenko / Donetsk State Administration (OVA): Russia kills civilians! (for June 22). 2022. https://t.me/pavlokrylenko_donoda/3751 (accessed August 9 2022).

199. Telegram. DPSU | State Border Service: The enemy attacked Sumy Oblast with incendiary shells. 2022. https://t.me/DPSUkr/4879 (accessed August 9 2022).

200. suspilne.media. News for June 24, 2022. https://suspilne.media/archive/2022/6/24/ (accessed August 9 2022).

201. suspilne.media. News for June 25, 2022. https://suspilne.media/archive/2022/6/25/ (accessed August 9 2022).

202. Telegram. Dmytro Zhivtsky / Sumy OVA: The situation as of 22:30 June 23, 2022. https://t.me/Zhyvytskyy/2816 (accessed August 9 2022).

203. Panchenko A. war.obozrevatel.com. Strong explosions rumbled in Kharkov: part of the city was left without power. 2022. https://war.obozrevatel.com/v-harkove-prorumberli-silnyie-vzryvyi-chast-goroda-ostalas-bez-sveta.htm (accessed August 9 2022).

204. Ivanov P. suspilne.media. Rescuers from Kirovohrad Oblast were involved in eliminating the consequences of shelling in Kremenchuk. 2022. https://suspilne.media/254714-ratuvalnikiv-z-kirovogradsni-zalucili-do-usunenna-nasilidkov-obstrulu-v-kremencuci/ (accessed August 9 2022).

205. Telegram. Dmytro Zhivtsky / Sumy OVA: The situation as of 22:00 June 28, 2022. https://t.me/Zhyvytskyy/2860 (accessed August 9 2022).

206. Mazurenko A. pravda.com.ua. The Russians shelled Kryvorozhskaya TPP - regional council. 2022. https://www.pravda.com.ua/rus/news/2022/06/28/7355257/ (accessed August 9 2022).

207. Telegram. Zelenodol city territorial community: Information for the evening 30.06.2022 Zelenodol community. 2022. https://t.me/zelenodolskatg/1136 (accessed August 9 2022).
210. suspilne.media. News for July 1, 2022. 2022. https://suspilne.media/archive/2022/7/1/ (accessed August 9 2022).
211. Zadorenko V. Facebook. July 2. Report of the city mayor 2022. https://www.facebook.com/Zadorenko/posts/pfbid02iTn8A6wZW15hvWUm5Vqfgf3tbTqRG7CRxGjT3jZ9a1MzYxe788C6nMcMqDC6H8bXI (accessed August 9 2022).
212. Ganyukova O. war.obozrevatel.com. Russian troops continue shelling the liberated territories of the Kherson region, - Vylkul. 2022. https://war.obozrevatel.com/vojskarrf-prodolzhat-poloshebiti-osvobozhdenyih-territoriy-hersonschiny-vylkul.htm (accessed August 9 2022).
213. Telegram. Valentyn Reznichenko/ Dnipropetrovsk State Administration (OVA): Dnipropetrovsk region July 3. 2022. https://t.me/dnipropetrovskoa/1243 (accessed August 9 2022).
214. 24tv.ua. The withdrawal of the Armed Forces from Lysychansk, the shelling of Slavyansk: the main highlights of the 130th day of the war. 2022. https://24tv.ua/ru/130-den-vojny-v-ukraine-glavnye-novosti-3-ijulja-2022-24-kanal_n2055303 (accessed August 9 2022).
215. suspilne.media. News for July 4, 2022. 2022. https://suspilne.media/archive/2022/7/4/ (accessed August 9 2022).
216. Petrenko R. pravda.com.ua. The occupiers report explosions and a large fire at the Donetsk railway station. 2022. https://www.pravda.com.ua/rus/news/2022/07/4/7356345/ (accessed August 9 2022).
217. Telegram. Dmytro Zhivytsky / Sumy OVA: The situation as of 22:00 July 5, 2022. 2022. https://t.me/Zhyvytskyy/2969 (accessed August 9 2022).
218. 24tv.ua. Restrictions for conscripts, explosions at enemy warehouses: the main points for the 132nd day of the war. 2022. https://24tv.ua/ru/132-den-vojny-v-ukraine-05-07-2022-novosti-za-sutki_n2073502 (accessed August 9 2022).
219. Telegram. Mykola Lukashuk - the head of the DOR: Russia's full-scale military invasion of Ukraine, 133 days, is coming to an end. 2022. https://t.me/mykola_lukashuk/695 (accessed August 9 2022).
220. Balachuk I. pravda.com.ua. The Russians hit Toretsk with missiles: people are under rubble. 2022. https://www.pravda.com.ua/rus/news/2022/07/6/7356624/ (accessed August 9 2022).
221. suspilne.media. Russia's invasion of Ukraine, day 134. 2022. https://suspilne.media/257910-vtorgnenna-rosii-v-ukrainu-den-134-tekstovij-onlajn/ (accessed August 9 2022).
222. Telegram. Dmytro Zhivytsky / Sumy OVA: The situation as of 21:00 July 8, 2022. 2022. https://t.me/Zhyvytskyy/3019 (accessed August 9 2022).
223. 24tv.ua. 12 dead and 30 injured civilians: how did the day of July 7 pass in the regions. 2022. https://24tv.ua/ru/novosti-ukraine-8-ijulja-2022-kak-proshli-sutki-v-oblastjah-24-kanal_n2080899 (accessed August 9 2022).
224. suspilne.media. News for July 9, 2022. 2022. https://suspilne.media/archive/2022/7/9/ (accessed August 9 2022).
225. suspilne.media. News for July 10, 2022. 2022. https://suspilne.media/archive/2022/7/10/ (accessed August 9 2022).
226. Roschina E. pravda.com.ua. Near Kryvyi Rih, Russian rockets destroyed the enterprise. 2022. https://www.pravda.com.ua/rus/news/2022/07/10/7357302/ (accessed August 9 2022).
227. Yakymyuk I. suspilne.media. Russian troops fired 7 rockets at Odesa region: one hit a residential building. 2022. https://suspilne.media/259225-po-odesini-rosijski-vyshki-vipustili-4-raketi-odna-vlucila-v-budivlu/ (accessed August 9 2022).
228. Facebook. Air Force Command of UA Armed Forces: Since the beginning of a full-masse invasion, the air force strikes 1700 group air attacks on the occupation forces 2022. https://www.facebook.com/kpszsu/posts/pfbid0Cwopsba5ZmaXFrf9bAfLQbfk0zJr1ed4C7yG9r2ovjXakyfe3D3RC21kJTfC6u4ul (accessed August 9 2022).

229. Telegram. Zaporizhia Regional Military Administration: WARNING! 2022. https://t.me/zoda_gov_ua/10357 (accessed August 9 2022).

230. Pavlova A, Abrashina K. vesti.ua. Chronology of the war in Ukraine: Wednesday, July 13. 2022. https://vesti.ua/strana/hronologiya-vojny-v-ukraine-sreda-13-iyulya-obnovlyaetsya (accessed August 9 2022).

231. Podhola J. suspilne.media. Missile strike on Dnipro July 15: Air defense destroyed four of six Kh-101 missiles launched by the Russian army from the Caspian Sea. 2022. https://suspilne.media/261084-raketnij-udar-po-dnipru-15-lipna-ppo-znisila-cotiri-raketi-h-101/ (accessed August 9 2022).

232. Telegram. Dmytro Zhivytsky / Sumy OVA: The situation as of 22:00 July 16, 2022. https://t.me/Zhyvytsky/3224 (accessed August 9 2022).

233. Ganyukova O. war.obozrevatel.com. Russian troops hit Pokrovsk with Iskander missiles: there are dead and wounded, a lot of destruction. 2022. https://war.obozrevatel.com/vojska-rf-udarili-raketoj-iskander-po-pokrovsku-est-pogibshie-i-ranenyie-mmogo-razrushenij-foto.htm (accessed August 9 2022).

234. suspilne.media. News for July 17, 2022. 2022. https://suspilne.media/archive/2022/7/17/ (accessed August 9 2022).

235. 24tv.ua. Shelling of Nikolaev with S-300 missiles, the displacement of Venediktova and Bakanov: the main highlights of the 144th day of the war. 2022. https://24tv.ua/ru/144-den-vojny-v-ukraine-17-07-2022-novosti-za-sutki_n2096834 (accessed August 9 2022).

236. Bobkov D. suspilne.media. Russian troops shelled Mykolaiv for the second time in a day. 2022. https://suspilne.media/261893-rosijski-vijska-vdruge-za-dobu-obstrilali-mikolaiv/ (accessed August 9 2022).

237. 24tv.ua. The Ukrainian Armed Forces destroyed the Russians' warehouse, the enemy's attack on Bakhmut: the main highlights of the 145th day of the war. 2022. https://24tv.ua/ru/145-den-vojny-v-ukraine-18-07-2022-novosti-za-sutki_n2096911 (accessed August 9 2022).

238. Facebook. Odesa District State Administration: A rocket hit was hit on the population of Odessa district yesterday! . 2022. https://www.facebook.com/100068947638352/posts/pfbid0QdqtBntGxqwoqLSMP5Wga4uFOSpyYH6sJpHt5FTT1TY1dU242Gj7EkJZaqPuxCPbl/ (accessed August 9 2022).

239. Chlek C. suspilne.media. The church and power grids were damaged - the Russian army shelled the Esman community in the Sumy region. 2022. https://suspilne.media/262590-poskodzeni-cerkva-ta-elektromerezi-armia-raf-obstrilala-esmansku-gromadu-na-sumsini/ (accessed August 9 2022).

240. Balachuk I. pravda.com.ua. Occupiers attacked Kharkiv: 3 dead. 2022. https://www.pravda.com.ua/rus/news/2022/07/20/7359104/ (accessed August 9 2022).

241. Tsyomyk A, Hnatiuk I. suspilne.media. On July 22, an 89-year-old woman was injured as a result of shelling of Zolochev in Kharkiv region. 2022. https://suspilne.media/263539-vnaslidok-obstrilu-zoloceva-na-harkivsini-22-lipna-89-ricna-zinka-otrimala-poranenna/ (accessed August 9 2022).

242. Apostrophe. The occupiers are failing on all fronts: a chronicle of the war in Ukraine on July 22. 2022. https://apostrophe.ua/news/world/2022-07-22/okkupantyi-terpyat-
neudachi-na-vseh-napravleniyah-onlayn-voynyi-v-ukraine-22-iyulya/274875 (accessed August 9 2022).

243. Voytiuk T, Yakymyuk I, Kolomiets D. suspilne.media. The Russian army struck the Odesa port, where the grain was located: what is known. 2022. https://suspilne.media/263646-rosiani-zavdali-raketnij-udar-po-odeskomu-portu-ok-pivden/ (accessed August 9 2022).

244. Telegram. Dmytro Zhivytsky / Sumy OVA: The situation as of 22:00 July 24, 2022. 2022. https://t.me/Zhyvytskyy/3408 (accessed August 9 2022).

245. Rudomskyi R. war.obozrevatel.com. The occupiers hit the Dnieper with rockets, after the explosions a fire started. 2022. https://war.obozrevatel.com/vojska-rf-udarili-raketami-po-dnepru-posle-vzryivov-nachalsya-pozhar-foto-i-video.htm (accessed August 9 2022).

246. suspilne.media. News for July 25, 2022. 2022. https://suspilne.media/archive/2022/7/25/ (accessed August 9 2022).

247. Apostrophe. Night strikes of the enemy and new equipment of the Armed Forces of Ukraine on the battlefield: the chronicle of the war on July 25. 2022. https://apostrophe.ua/news/politics/government/2022-07-25/nochnyie-udaryi-vraga-i-novaya-tehnika-vsu-na-pole-boya-onlayn-voynyi-25-iyulya/275064 (accessed August 9 2022).

248. Telegram. Dmytro Zhivytsky / Sumy OVA: The situation as of 21:30 July 26, 2022. 2022. https://t.me/Zhyvytskyy/3432 (accessed August 9 2022).

249. Hluschenko O, Balachuk I. pravda.com.ua. At night, the Russians shelled Kharkov and Chuguev from S-300s. 2022. https://www.pravda.com.ua/rus/news/2022/07/26/7360178/ (accessed August 9 2022).

250. Zubar D. suspilne.media. They are harming Ukraine and disposing of old projectiles: the expert spoke about the shelling of Odesa by Soviet missiles. 2022. https://suspilne.media/265107-skodat-ukraini-ta-utilizuut-snaradi-ekspert-rozpozriv-pro-obstrili-odesini-radanskimi-raketami/ (accessed August 9 2022).

251. Horbatenko I. suspilne.media. In the evening of July 28, bombs were dropped on the outskirts of Mykolaiv. Three people were injured. 2022. https://suspilne.media/265623-vveceri-28-lipna-na-peredmista-mikolaeva-skinuli-bombu/ (accessed August 9 2022).

252. Telegram. Mykola Lukashuk - the head of the DOR: Russia's full-scale military invasion of Ukraine, 156 days, is coming to an end. 2022. https://t.me/mykola_lukashuk/842 (accessed August 9 2022).

253. Petrenko R. pravda.com.ua. The UN "with the permission of the parties” is ready to investigate the murder of prisoners in Elenovka. 2022. https://www.pravda.com.ua/rus/news/2022/07/30/7361080/ (accessed August 9 2022).

254. Telegram. Mykola Lukashuk - the head of the DOR: Russia's full-scale military invasion of Ukraine, 157 days, is coming to an end. 2022. https://t.me/mykola_lukashuk/848 (accessed August 9 2022).

255. Lutskyi P. ostannipodii.com. War in Ukraine. Operational information for the morning of July 31. 2022. https://ostannipodii.com/ru/a/202207/voyna-v-ukraine-operativnaya-informatsiya-na-utro-31-iyulya-110026349/ (accessed August 9 2022).

256. Pavlova A, Abrashina K. vesti.ua. Chronology of the war in Ukraine: Tuesday, August 2. 2022. https://vesti.ua/strana/chronologiya-vojny-v-ukraine-vtorinik-2-avgusta-obnovlyaetsya (accessed August 9 2022).