UDC 656.1.5 DOI: 10.30977/AT.2219-8342.2024.54.0.04

# Analysis of traffic safety on the roads of the Kharkiv region during the period of martial law

**Riabushenko O.[1], Popadynets D.[2], Vorontsov Y.[3]**

[1]Kharkiv National Automobile and Highway University, Ukraine
[2]Patrol Police Department in the Kharkiv Region of the Patrol Police Department
[3]State University of Infrastructure and Technologies, Ukraine

***Annotation. Problem.*** *The functioning of road transport in regions of long-term armed conflicts is associated with additional risks for road traffic safety. The degree of influence of additional risk factors can be investigated by analyzing traffic accident statistics in such a region.* ***Goal.*** *The purpose of the work is to study the impact of martial law conditions on road safety indicators in the Kharkiv region of Ukraine by comparing statistical data on accidents and road deaths due to road accidents.* ***Methodology.*** *To achieve the goal, the work uses methods of statistical analysis of data and construction of trends, methods of determining relative indicators of the severity of road accidents.* ***Results.*** *As a result of the analysis of statistical data on road accidents in the Kharkiv region, the distribution of accident rates for the period from 2019 to 2023 was obtained, which made it possible to reveal their significant differences during the period of martial law compared to previous periods. In particular, it was established that with a decrease in the total number of road accidents, there was an increase in the severity of the consequences of road accidents. This regularity was confirmed by analyzing the relative indicators of road accident severity. The identified differences in accident and death rates on the roads of the Kharkiv region in 2023 compared to the periods before the start of hostilities indicate a change in road traffic conditions.* ***Originality.*** *The paper investigated the impact of martial law conditions on road safety on the example of the Kharkiv region of Ukraine. As a result, the degree of influence of the risk factors that arose as a result of the deployment of the armed conflict on the increase in the level of danger for road users was established.* ***Practical value.*** *The obtained results can be used for planning and implementation of measures to ensure traffic safety on highways in regions that are the zone of long-term armed conflicts.*

***Key words:*** *road traffic, road safety, road traffic accidents, martial law conditions, severity factor, distribution of road accidents.*

## Introduction

In the context of ongoing military aggression, when Ukraine defends its territorial integrity and independence, as statistics show, road accidents are the second most important factor in danger to the life and health of citizens, that is, Ukraine loses more than on the roads only as a result of hostilities [1].

Over the past two years, the conditions for the functioning of road transport in Ukraine have changed slightly, which has affected road safety. In addition to the previously existing accident factors, new ones have arisen related to the functioning of road traffic under martial law and the reorientation of transport infrastructure to the needs of ensuring the country's defense capability [2].

After the start of armed aggression against Ukraine in February 2022, the Kharkiv region immediately became a war zone and for six months, until September 2022, a significant part of the region was under occupation. As a result of hostilities, the transport infrastructure of the city and the region, which, despite everything, continued to work in new conditions, suffered significant destruction.

Changes in traffic conditions during martial law were supposed to affect road accident and mortality rates both in Ukraine as a whole and in

its individual regions. A comparative analysis of road accident statistics in the Kharkiv region will allow to identify special accident factors that allow for a deeper study of the causes of their occurrence and the development of appropriate measures to prevent them. Based on the analysis of accident rates, it is possible to develop effective measures to improve road safety both in the current conditions of martial law and in the period of post-war reconstruction of the country.

**Analysis of publications on the problem of road safety in the conditions of military conflict**

Research on the analysis of traffic conditions and hazards during hostilities is of great importance for understanding and managing road safety under martial law. Some of the findings and recommendations obtained as a result of such studies can be useful for ensuring road safety during armed conflicts and the long-term instability inherent in this period.

Due to the complexity of the issue of analyzing road safety indicators in the context of the military conflict in Ukraine and the small amount of available initial data, there are almost no publications on this topic [1]. As for foreign publications related to this problem, there are those in which the authors analyze data for regions of the world such as Syria, Iraq, Afghanistan, the former Yugoslavia, etc. Analysis of such publications [2-11] shows that traffic problems during martial law and direct hostilities have their own specific features. The main issues on which the authors focus can be identified:

1. The impact of hostilities on transport infrastructure.
2. Issues of safety of passengers and personnel of the transport industry.
3. Problems of functioning of the transport system and society.
4. Humanitarian aspects.

First of all, as a result of hostilities, road networks, bridges and infrastructure can be damaged or destroyed, which affects the overall ability to transport people and goods. Research in this area is aimed at determining the mechanisms for restoring transport infrastructure and ensuring traffic safety in armed conflict.

During hostilities, all road users are at risk of becoming victims of accidental shelling, actions of armed groups, etc. Here, research focuses on understanding risks and developing safety measures such as vehicle protection systems, passenger evacuation, and communication strategies in conflict settings [4,5]. As hostilities can have a serious impact on a country's economy and society, some studies focus on examining the economic consequences of the conflict and developing strategies to improve the transport system after the end of hostilities. Researchers also analyze social and humanitarian issues related to road safety in the face of hostilities. For example, they study the impact of conflict on the health and psychological resilience of road users and develop psychological support and rehabilitation programs [3].

The overall objective of such studies is to improve road safety and efficiency in the context of military conflict, as well as to ensure convenient and safe movement for the population and road transport personnel in the conflict zone. Almost all authors note that during military conflicts or hostilities, the level of road safety decreases due to additional factors, such as increased traffic, traffic congestion, lack of traffic lights and other means of regulation, damage and pollution of road infrastructure, as well as sudden movements of military equipment and military personnel. This leads to an increase in the number of accidents and injuries on the roads.

**Analysis of Specific Road Traffic Hazards under Martial Law**

Analysis of specific traffic conditions in Ukraine allows us to better understand the causes that affect road safety during armed conflicts, to create recommendations in the future to reduce the risks of accidents and their consequences. This can help governing bodies and organizations to develop and implement effective measures to ensure road safety in similar conditions.

The conditions of martial law have a significant impact on road traffic both in Ukraine as a whole and within individual regions and settlements, depending on their proximity to the immediate war zone. War risks may include, in addition to hostilities, terrorist acts or other threats to civilian security. This obviously leads to a violation of the stable mode of operation of the street and road network and an increase in the number of accidents, as drivers and pedestrians may be forced to drive on dangerous sections of roads or ignore traffic rules.

Under martial law, access to certain sections of roads may be restricted or modified, for example, entry or movement near important military facilities or approaching a war zone is prohibited. This can lead to increased congestion

on other highways, which can cause additional delays and traffic congestion.

The next important factor is the risk of interference with the movement of vehicles. In particular, the conditions of martial law have led to the appearance of checkpoints, checkpoints on the country's roads, as well as artificial obstacles created to protect military facilities or control traffic. It requires drivers to comply with special requirements and traffic rules that may differ from normal traffic rules.

Also, under martial law, there is an increased movement of military equipment, including trucks, armored vehicles and other types of special equipment. This can lead to a change in traffic patterns and an increase in the risk of accidents.

Martial law conditions may include additional restrictions and traffic controls. For example, drivers and vehicles may be subject to additional checks and other control measures at checkpoints or checkpoints. This can lead to traffic delays and an increase in mental stress on drivers, which in turn will have a negative impact on road safety.

Martial law conditions can also lead to violations of traffic rules by both military personnel and the public. Some studies indicate that during military conflicts, drivers increase speed, ignore traffic signals and other means of regulation, run red lights and do not give priority to traffic [4]. This increases the risk of an accident and increases the number of victims.

During hostilities, the availability of medical care on the roads becomes problematic due to the destruction of infrastructure, equipment, and overload of medical facilities. Lack of timely medical care can increase the number of deaths due to injuries that victims receive as a result of road accidents.

Drivers of military equipment also face special road safety challenges during hostilities. They must take into account not only the general rules of road safety, but also take into account the characteristics of their vehicle. Failure to follow safe handling practices for military equipment can lead to serious accidents. Also, in light of the threat to traffic safety during martial law, special attention should be paid to the training of drivers of military equipment. This may include inspections of the technical condition of vehicles, updating driving skills, conducting training on safe driving in traffic conditions, etc.

These factors and their relative importance may vary depending on the specific situation and conditions of the region, but in any case, these factors change the conditions for the functioning of the transport system. In general, it can be noted that the conditions of martial law in Ukraine have a significant impact on road traffic and its safety, requiring additional attention, caution and responsibility from all road users.

**Analysis of direct road accident rates**

The city of Kharkiv is one of the largest cities in Ukraine with a developed transport infrastructure. According to the Main Department of Statistics in the Kharkiv region, as of January 1, 2022, more than 1.4 million people permanently lived in the city, which causes significant volumes of traffic and pedestrian flows on the city's road network. All this naturally led to a significant level of accidents and deaths as a result of road accidents.

At the first stage of the study, it is expedient to analyze the distribution of absolute accident rates in the region. Such indicators include the total number of road accidents registered ( $Z_t$ ), the number of road accidents in which victims (dead or injured people) were found ( $Z_v$ ), as well as the number of deaths ( $D$ ) and the number of injured ( $W$ ) as a result of road accidents.

To assess the level and indicators of road traffic safety in the Kharkiv region after the introduction of martial law, it is advisable to conduct a comparative analysis of statistical data on road accidents and road traffic injuries as a result of road accidents in the Kharkiv region for the period from 2019 to 2023 inclusive.

Generalized statistics on road accidents for the three pre-war years, as well as for 2022 and 2023, are shown in Table 1. Figures 1 and 2 show the corresponding graphs.

Table 1. Statistical data of road accidents in Kharkiv region

| Year | 2019 | 2020 | 2021 | 2022 | 2023 |
|---|---|---|---|---|---|
| $Z_t$ | 11949 | 11912 | 12477 | 4565 | 6265 |
| $Z_v$ | 1835 | 1820 | 1597 | 880 | 1402 |
| $D$ | 188 | 174 | 214 | 156 | 193 |
| $W$ | 2223 | 2188 | 1817 | 992 | 1729 |

It can be seen that in the period 2019-2021, the transport network of the city of Kharkiv and the

Kharkiv region functioned in a stable mode, so the total number of accidents at the end of each year was almost the same. There was a certain tendency to increase the number of people killed as a result of road accidents while the number of injured people decreased.

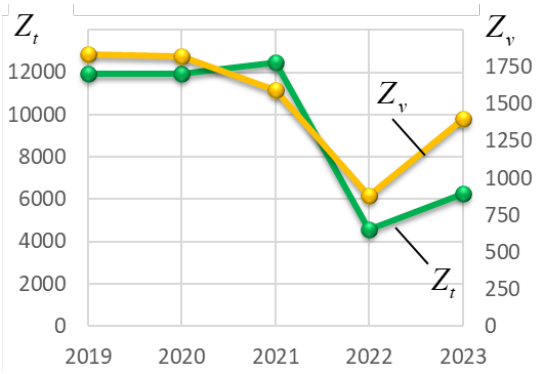


Fig. 1. Graph of changes in the number of road accidents in Kharkiv region

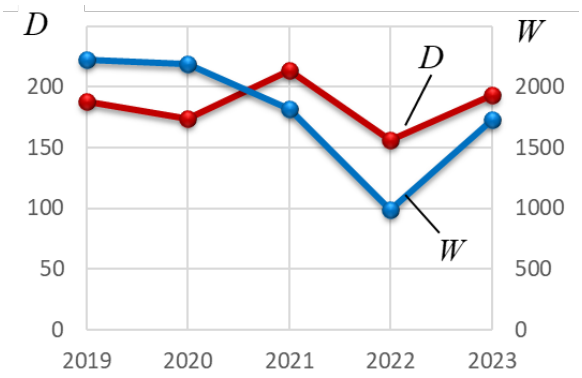


Fig. 2. Graph of changes in the number of dead and injured as a result of road accidents

The main factor influencing the transport system of the city of Kharkiv was the mass evacuation of the city's population at the end of February and in March 2022.According to the estimates of the Kharkiv Regional Military Administration, in the spring of 2022, 300-400 thousand residents remained in the city [12]. But starting in May, residents began to gradually return to the city. Thus, in July 2022, the city had from 700 to 800 thousand inhabitants, and in November 2022, the number of permanent population of the city approached one million one hundred thousand inhabitants. As of February 2024, the city's population was estimated at 1.3 minions of residents.

Given the predominance of personal vehicles in the traffic flow, these factors led to significant changes in the number of accidents and deaths in the Kharkiv region during martial law compared to previous periods. At the end of 2022, there was a significant decrease in the number of registered accidents on the roads of the region, as well as a decrease in the number of deaths and injuries due to road accidents. In the following year, 2023, the total number of road accidents, as well as the level of injuries and deaths, showed a significant increase, and the number of deaths and injuries almost reached the pre-war level.

**Analysis of the distribution of road accidents by months of the year**

You can trace the above changes in accident and mortality rates on the roads of the Kharkiv region during martial law in more detail on the graphs of changes in the number of accidents, the number of dead and wounded by months of the year. The corresponding graphs are shown in Figures 2, 3, 4.

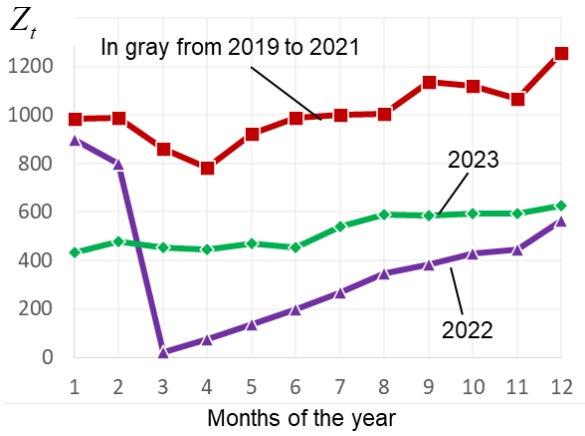


Fig. 3. Distribution of the number of accidents by months of the year

As can be seen from Figure 3, the monthly total number of road accidents in the Kharkiv region from 2019 to 2021 was approximately constant, taking into account some seasonal changes. The largest number of cases was recorded in December, which can be explained by the deterioration of road conditions in winter. Also in September, there was a slight surge in accidents, which may be caused by an increase in the transport activity of the population after the summer vacation period. If you look at the corresponding graph for 2022, you can see a sharp decrease in the number of road accidents in March related to the outbreak of hostilities in the region. However, from April to the end of the year, there was a gradual uniform increase in the monthly number of road accidents. During the next 2023, the distribution of the total number of road accidents remained almost uniform and amounted to only 52% of the annual average for the period 2019-2021, that is, for the three pre-war months. Thus, it can be stated

that under martial law, the total number of road accidents in the region has almost halved.

Fig. Figure 4 shows the distribution of the number of road accidents with victims by months of the year. In general, the picture of changes in this indicator is similar to the previous one, but the values for 2023 are almost equal to the values for the pre-war period. The number of road accidents with victims in 2023 was only 20% lower than the average for the period 2019 - 2021.

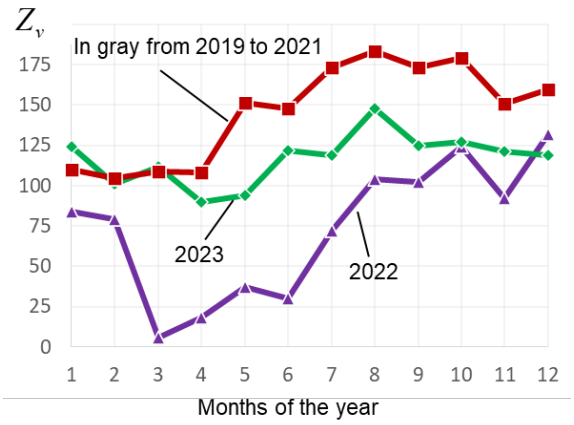


Fig. 4. Distribution of the number of road accidents with victims by months of the year

The distribution of the number of fatalities in road accidents by month in 2022 (Fig. 5) also shows a sharp drop in this indicator in March. However, the death toll rises sharply the following month and reaches the pre-war average by August. It can also be seen that the distribution of the number of deaths in 2023 does not differ much from the pre-war figures. Against the background of a relative decrease in the total number of road accidents in 2023 compared to pre-war values, this indicates an increased average severity of road accidents under martial law.

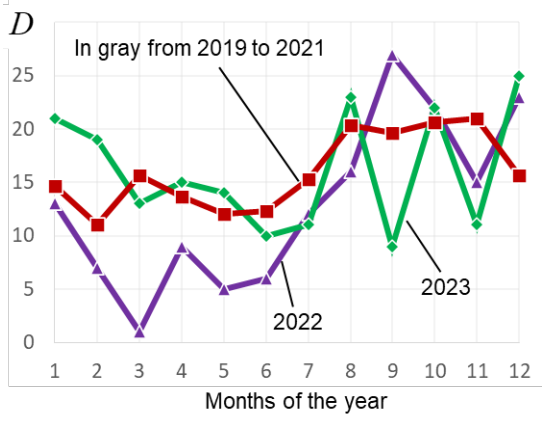


Fig. 5. Distribution of the number of fatalities as a result of road accidents by months of the year

An analysis of the monthly change in the number of injured as a result of road accidents (Fig. 6) shows that in 2022 there was also a sharp drop in this indicator in March and its further increase with reaching pre-war values by December. In 2023, by analogy with the number of fatalities, the monthly number of people injured in road accidents remained stable on average, with a value 17% lower than the average for the three pre-war years.

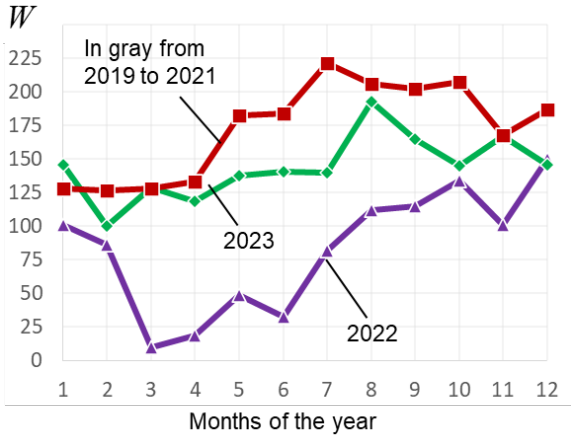


Fig. 6. Distribution of the number of injured as a result of road accidents by months of the year

Thus, having evaluated the above results in totality, we can say that 2022 can be called a transitional year for the Kharkiv region in terms of traffic functioning, when both residents and transport infrastructure adapted to the conditions: from the threat of destruction of the city and occupation in 2022 to sustainable functioning in the conditions of a prolonged military conflict on the borders of the region during 2023.

**Analysis of the distribution of road accidents by type**

The analysis of the distribution of accidents by type is aimed at identifying the features of traffic conditions that have an impact on safety and can contribute to the occurrence of various types of accidents. Determining the frequency of occurrence of certain types of accidents allows you to understand which emergencies are the most common and potentially the most dangerous, to help identify the main factors that contribute to accidents of a certain type. Such information can be further used to develop and implement measures to prevent accidents. General data on the distribution of road accidents by type are given in Table 2. and 3.

Table 2. Distribution of road accidents by type in Kharkiv region in 2021

| Type of accident | $Z_t$ | $Z_v$ | $D$ | $W$ |
|---|---|---|---|---|
| Collision | 8472 | 691 | 69 | 912 |
| Hitting a stationary vehicle | 1686 | 37 | 6 | 36 |
| Hitting an obstacle | 1292 | 129 | 17 | 155 |
| Hitting a pedestrian | 623 | 527 | 87 | 471 |
| Ovirturning the vehicle | 264 | 124 | 24 | 160 |
| Hitting a ciclist | 84 | 64 | 8 | 58 |
| Hitting animals | 43 | 1 | 0 | 1 |
| Falling loads | 16 | 0 | 0 | 0 |
| Falling passengers | 21 | 17 | 0 | 17 |
| Collision with horse-drawn transport | 0 | 0 | 0 | 0 |

Table 3. Distribution of road accidents by type in the Kharkiv region in 2023

| Type of accident | $Z_t$ | $Z_v$ | $D$ | $W$ |
|---|---|---|---|---|
| Collision | 3626 | 643 | 59 | 951 |
| Hitting a stationary vehicle | 823 | 14 | 2 | 14 |
| Hitting an obstacle | 1057 | 195 | 32 | 240 |
| Hitting a pedestrian | 439 | 385 | 65 | 341 |
| Ovirturning the vehicle | 233 | 114 | 28 | 137 |
| Hitting a ciclist | 50 | 38 | 7 | 32 |
| Hitting animals | 18 | 0 | 0 | 0 |
| Falling loads | 3 | 0 | 0 | 0 |
| Falling passengers | 15 | 13 | 0 | 14 |
| Collision with horse-drawn transport | 1 | 0 | 0 | 0 |

As a result of the analysis of statistical data, changes in the structure of types of road accidents during martial law compared to the previous period were established. Since, as noted above, there was a significant outflow of population from the city of Kharkiv during 2022, and part of the region was in the occupation zone for a significant time, it is advisable to choose 2021 and 2023 for comparison, when traffic conditions can be considered stable throughout the year.

Displaying the data in the form of a bar graph allows you to visually assess the relative shares of different types of accidents in their total number for both periods of the study (Fig. 7 and 10). Figure 7 shows the distribution by type of the total number of road accidents.

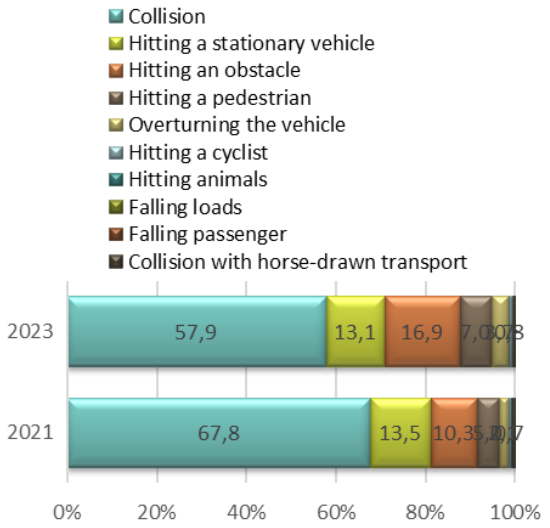


Fig. 7. Distribution of the total number of road accidents by type

As you can see, in 2023 compared to 2021, there was a 10% decrease in the relative share of collisions, with an increase of almost 7% in the relative share of collisions with obstacles and a 2% increase in collisions with pedestrians.
The distribution of the number of accidents with victims by type is presented in Fig. 8.

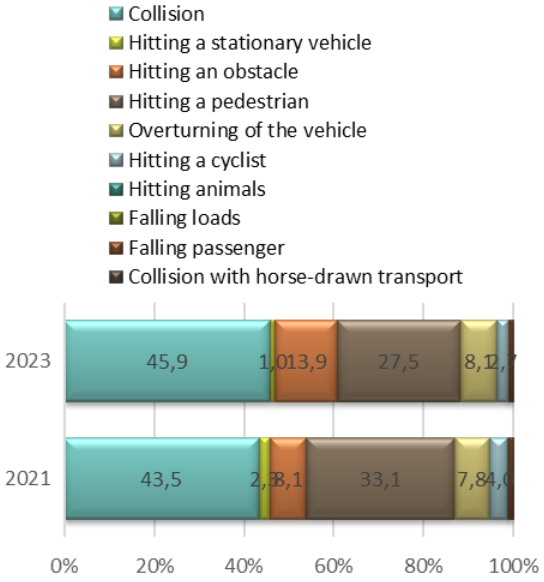


Fig. 8. Distribution of the number of road accidents by victims by their types

Here we can note an increase of almost 8% in the relative number of collisions with obstacles and a decrease of 5.5% in the share of collisions with pedestrians.

Figures 9 and 10 illustrate the breakdown by type of accident, respectively, of the number of people killed and injured as a result of road accidents.

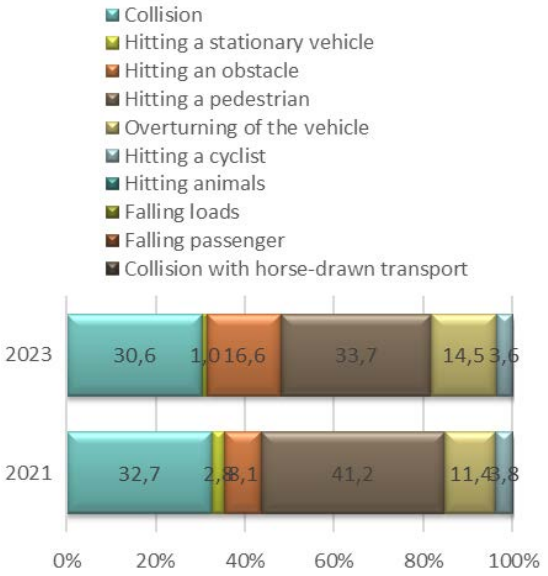


Fig. 9. Distribution of the number of fatalities in road accidents by their types

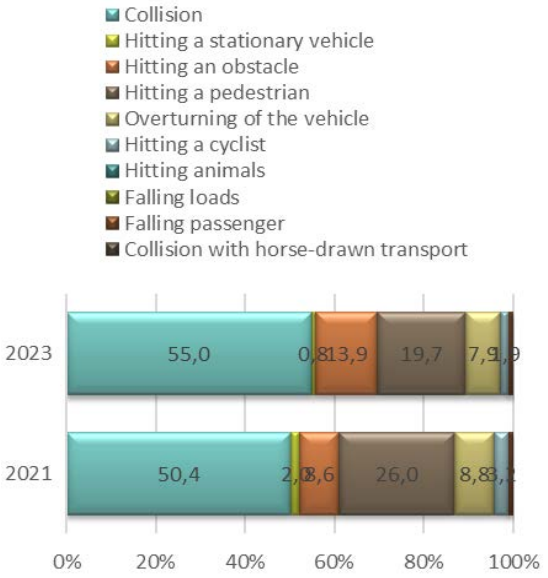


Fig. 10. Distribution of the number of injured in road accidents by their types

Similarly, in 2023, we can state an increase in the relative number of deaths (by 8.5%) and injuries (by 5%) as a result of a vehicle hitting an obstacle. At the same time, the relative number of dead and injured as a result of hitting a pedestrian decreased.

Thus, it can be stated that the structure of the distribution of accident and mortality rates by types of accidents under martial law as a whole has not undergone significant changes, at the same time there has been an increase in the relative weight of collisions with an obstacle. The reason for this phenomenon, in our opinion, deserves further analysis.

**Analysis of changes in the severity of road accidents**

Relative indicators of severity help to assess the negative consequences of accidents for society and are important characteristics of the level of traffic management. These indicators also make it possible to quantitatively identify and compare the severity of road accidents in different regions, on different sections of the road or over different periods of time.

There are several methods for calculating the relative severity of road accidents, such as average severity (MRT), severity and loss rating (IRL), and others. In addition, severity indices can be used, which include the number and severity of injuries, doctor's examinations, duration of treatment, and other factors [13, 14].

One of the most accessible methods is the calculation of the so-called accident severity coefficients [15]. These coefficients are obtained by comparing the number of fatalities or injuries and the total number of events in the region and, depending on the combination of specific indicators, can reflect certain aspects of the severity of the accident. Their numerical values can be obtained as:

$$C_1 = \frac{D}{Z_t} \cdot 100, \quad (1)$$

$$C_2 = \frac{D+W}{Z_t} \cdot 100, \quad (2)$$

$$C_3 = \frac{D}{W}. \quad (3)$$

To assess the level of social danger from traffic, the social risk indicator *RH* (*human risks*) is widely used, which is the relative number of fatalities in road accidents per 100 thousand inhabitants:

$$HR = \frac{D}{N_p}, \quad (4)$$

where *Np* is the average population of the region in the reporting period.

It can be seen that the coefficients $C_1$ and $C_2$ reflect, respectively, the average number of dead and injured per 100 cases of road accidents. The coefficient $C_3$ characterizes the relative

mortality among the victims. The value *HR* shows the average number of deaths in road accidents for every 100 thousand inhabitants.

As a result of the calculation of these coefficients, the graphs presented in Fig. 11, 12, and the values themselves are given in Table 3.

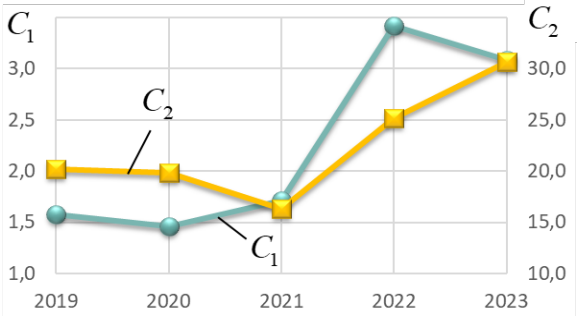


Fig. 11. Change in the coefficients of severity of road accidents by years for Kharkiv region

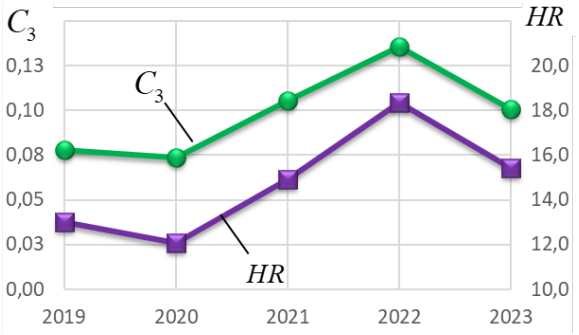


Fig. 12. Change in relative mortality among victims and the value of social risk of road accidents by years for Kharkiv region

Figure 6 shows that during 2019 - 2021, the coefficients $C_1$ and $C_2$ almost did not change, while under martial law there was a significant increase in these indicators.

Table 3. The values of the coefficients of the severity of road accidents and the value of social risk are calculated

| Year | 2019 | 2020 | 2021 | 2022 | 2023 | On average for 2019-2021. | On average for 2022-2023. | Growth, % |
|---|---|---|---|---|---|---|---|---|
| $C_1$ | 1,57 | 1,46 | 1,72 | 3,42 | 3,08 | 1,58 | 3,25 | 105 |
| $C_2$ | 20,18 | 19,83 | 16,28 | 25,15 | 30,68 | 18,76 | 27,91 | 49 |
| $C_3$ | 0,08 | 0,07 | 0,11 | 0,14 | 0,10 | 0,09 | 0,12 | 38 |
| *HR* | 13,00 | 12,06 | 14,92 | 18,35 | 15,44 | 13,33 | 16,90 | 27 |

This indicates that the accidents that occurred in the region during 2022 and 2023 were more severe.

Figure 6 also shows an increase in relative mortality among victims of road accidents, as well as the value of social risk during martial law. At the same time, as noted earlier, in terms of the absolute number of deaths, the peak was in 2021.

As can be seen from Table 3, under martial law, the relative risk of death or injury to a person in an accident increased by 105% and 49%, respectively. Relative mortality among victims increased by 38%, and the social risk of death in road accidents increased by 27%.

## Conclusion

The conditions of martial law usually lead to a violation of the stable mode of operation of the transport network and an increase in the risk of accidents due to the formation of additional danger factors. Among the main ones are damage to transport infrastructure, restriction of access to certain sections of roads, obstacles to traffic, movement of military equipment on public roads; additional traffic restrictions and controls; psychological burden on road users.

As can be seen from the results of the analysis, at the end of 2022, there was a decrease in the total number of road accidents in the Kharkiv region, as well as the number of deaths and injuries. In the following 2023, the total number of road accidents, as well as the level of injuries and deaths, showed a significant increase, and the number of dead and injured almost reached the pre-war level.

The study of the distribution of statistical indicators of road safety by months of the year for the periods of 2019 - 2023 showed a sharp decrease in the number of accidents in March 2022, and its uniform increase from April to the end of the year. During the next 2023, the distribution of the total number of road accidents remained almost uniform and amounted to 52% of the average for the period 2019-2021 in annual terms.

The structure of the distribution of accident and mortality rates by type of accident under martial law as a whole has not undergone significant changes, but there has been an increase in the relative weight of such a type of accident as hitting an obstacle.

Thus, the identified differences in the accident and mortality rates on the roads of the Kharkiv region in 2023 compared to the periods before the start of the armed conflict indicate a change in traffic conditions, as a result of which, with a decrease in the total number of accidents on the WYD of the region, there was an increase in the number of dead and wounded.

The analysis of changes in the coefficients of the severity of road accidents and the social risk indicator showed that during the period of martial law, the relative risk of death or injury of a person in case of an accident increased by 105% and 49%, respectively. Relative mortality among the victims increased by 38% and the social risk of death in road accidents increased by 27%. This requires taking measures to improve road safety on the roads of Kharkiv region by identifying and eliminating additional hazards.

Since the Kharkiv region is likely to continue to be a zone of possible hostilities until the end of the armed conflict, the conditions for the functioning of its transport network will not change. Therefore, the population of the region will continue to be in conditions of increased risks from traffic. In conditions when Ukraine suffers heavy losses every day, defending its territory and independence from long-term military aggression, it is even more impossible to put up with the loss of health and life of people as a result of road accidents. Therefore, it is extremely important to conduct further research on this problem in order to identify and eliminate additional road hazards associated with the conditions of martial law.

## Conflict of interests

The authors declare that there is no conflict of interests regarding the publication of this paper.

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**Riabushenko Oleksandr**[1], PhD, Associate Professor, Department of Traffic Management and Road Safety,
e-mail: riabushenko79@ukr.net,
Phone.: +38 (066)-858-36-51,
ORCID: http://orcid.org/0000-0002-8415-5733
**Popadynets Dmytro** [2], Senior Inspector for Special Assignments of the Department of Investigation, Police Captain,
e-mail: dima626dima626@gmail.com,
Phone.: +38 (093) 258 90 69,
ORCID: http://orcid.org/0009-0008-1711-1184
**Vorontsov Yaroslav**[3], Postgraduate student,
e-mail: vorontsov.yaroslav@gmail.com,
Phone.: +38-(093)-253-55-33
ORCID: http://orcid.org/0009-0000-8178-5468

[1]Kharkiv National Automobile and Highway University Yaroslava Mudrogo str., 25, Kharkiv, Ukraine, 61002
[2]Patrol Police Department in the Kharkiv Region of the Patrol Police Department, Kharkiv, str. Shevchenko, 315-A, Ukraine, 61033.
[3]National University of Water and Environmental, Kirillovskaya str. 9, Kyiv, Ukraine, 04071

**Аналіз безпеки руху на дорогах Харківської області в період воєнного стану**

***Анотація. Проблема.*** *Функціонування автомобільного транспорту в регіонах, де спостерігаються тривалі збройні конфлікти пов'язано з додатковіти ризиками для безпеки дорожнього руху. Ступінь впливу додаткових факторів небезпеки може бути досліджено шляхом аналізу статистики ДТП в такому регіоні.* ***Мета.*** *Метою роботи є дослідження впливу умов військового стану на показники безпеки дорожнього руху в Харківській області України шляхом порівняння статистичних даних аварійності та смертності на дорогах внаслідок ДТП.* ***Методологія****. Для досягнення поставленої мети в роботі використовуються методи статистичного аналізу даних та побудови трендів, методи визначення відносних показників тяжкості ДТП.* ***Результати.*** *В результаті аналізу статистичних даних ДТП у Харківській області був отриманий розподіл показників аварійності за період з 2019 по 2023 роки, що дозволило виявити суттєві їх відмінності в період воєнного стану порівняно з попередніми періодами. Зокрема встановлено, що при зниженні загальної кількості ДТП відбулося зростання тяжкості наслідків ДТП. Ця закономірність була підтверджена шляхом аналізу відносних показників тяжкості ДТП. Виявлені відмінності у показниках аварійності та смертності на дорогах Харківської області у 2023 році порівняно з періодами до початку військових дій говорять про зміну умов дорожнього руху.* ***Оригінальність.*** *В роботі було досліджено питання впливу умов військового стану на безпеку дорожнього руху на прикладі Харківської області України. В результаті було встановлено ступінь впливу факторів ризику, що виникли в результаті розгортання збройним конфлікту, на підвищення рівня небезпеки для учасників дорожнього руху.* ***Практичне значення****. Отримані результати можуть бути використані для планування та реалізації заходів щодо забезпечення безпеки дорожнього руху на автомобільних дорогах в регіонах, які є зоною тривалих збройних конфліктів.*

***Ключові слова:*** *дорожній рух, безпека дорожнього руху, дорожньою-транспортні пригоди, умови військового стану, коефіцієнт тяжкості, розподіл ДТП.*

**Рябушенко Олександр Васильович**[1], к.т.н., доц. каф. організації та безпеки дорожнього руху,
e-mail: riabushenko79@ukr.net,
тел. +38 (066)-858-36-51,
ORCID: http://orcid.org/0000-0002-8415-5733
**Попадинець Дмитро Миколайович**[2], старший інспектор з особливих доручень відділу розшуку, капітан поліції,
e-mail: dima626dima626@gmail.com,
тел. +38 (093) 258 90 69,
ORCID: http://orcid.org/0009-0008-1711-1184
**Воронцов Ярослав Сергійович**[3], аспірант,
e-mail: voroncov.yaroslav@gmail.com,
тел. +38-(093)-253-55-33
ORCID https://orcid.org/0009-0000-8178-5468

[1]Харківський національний автомобільно-дорожній університет, вул. Ярослава Мудрого, 25, м. Харків, Україна, 61002.
[2]Управління патрульної поліції в Харківській області Департаменту патрульної поліції, м. Харків вул. Шевченка, 315-А, Україна, 61033.
[3]Державний університет інфраструктури та технологій, вул. Кирилівська 9, м. Київ, Україна, 04071.