

# Wiadomości Lekarskie Medical Advances



**VOLUME LXXVII, ISSUE 2, FEBRUARY 2024**

Official journal of Polish Medical Association has been published since 1928

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Memory of  
dr Władysław  
Biegański

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## Impact of meeting housing needs on human health

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### ABSTRACT

**Aim:** To identify the impact of meeting the housing needs on human health, which must be taken into account when developing the health care policy for the country's population.

**Materials and Methods:** The system of general scientific and special research methods was used during the research. The materials of the work were: statistical data; standards and recommendations regarding sanitary living conditions; court case-law; reports in mass media; scientific sources; regulatory legal acts of Ukraine.

**Conclusions:** Sanitary and hygienic conditions of living in housing provide for the formation of a human life environment, where there is no harmful effect of its factors on human health and there are opportunities to ensure normal and to restore impaired body functions. Each person is responsible for maintaining own sanitary and hygienic living conditions in the housing. Sanitary and hygienic living conditions of a person must be considered through the principle of reasonableness and safety of public health.

**KEY WORDS:** human rights, health care, sanitary standards, housing, housing policy, living conditions

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## INTRODUCTION

The urgent areas of the society's development strategy are the provision of human / public health and meeting the housing needs. The relationship between the quality, safety and availability of housing on the one hand and the health, well-being of people on the other is well known, because housing can simultaneously be both an element of human protection and the main source of harm and risk to the health [1]. Both scholars and ordinary residents pay attention to the relationship between meeting the housing needs and human health. The latter express concern and try to take various measures against poor-quality housing and its impact on people's health and city functioning [2]. At the same time, attention is not always paid to such mutuality at the level of political decisions. Thus, the Strategy of Human Development, approved by the Decree of the President of Ukraine dated from June 2, 2021 No. 225/2021 has no areas for preserving public health at the expense of the development of the system for providing housing needs. The document only emphasizes the uncertainty of housing perspectives for internally displaced persons [3]. Depriving a person of own housing as a result of war has a negative impact

both on a person's social protection, as well as physical and mental health.

The issue of economic poverty is urgent for the population of Europe. A third of the population on the European continent lives on the edge of poverty, and more than half of them live in cold apartments. 45% of the population does not heat their homes enough to save money. Europe's population suffered from energy poverty is almost three times more often live in damp, unhealthy buildings. However, living in unheated house affects the health. People who cannot maintain thermal comfort in their apartments during the winter period are twice more often complain on health problems. Almost every third resident of underheated house has such problems in Poland. However, houses affect the health of their residents not only because of poor living conditions. Thus, single-family houses with low energy standards and outdated heating systems (about 40%) do not always use environmentally friendly materials for heating. They are responsible for the formation of smog and poor air quality in Poland [4].

Many somatic health problems arise as a result of the direct or indirect influence of living conditions. Thus, health is affected by construction materials, equipment,



dimensions and design of the apartment. Let's consider the example with *Legionella pneumophila*. The Bellevue Stratford Hotel in Philadelphia hosted the Pennsylvania American Legion Veterans Convention in 1976, which resulted with the death of 29 members and 5 hotel employees. 221 people had severe pneumonia at that time. Joseph McDade proved that the cause of this mass disease was a previously unknown microorganism that was formed in the air conditioner of a hotel room. The researcher called it *Legionella pneumophila* (legionnaires disease) [5]. The given example emphasizes the relationship between living conditions and human health. It must be taken into account when improving the legal provision of health care protection for both a specific person and for public health in general.

## AIM

The purpose of the article is to identify the impact of meeting the housing needs on human health, which must be taken into account when developing the health care policy for the country's population.

To achieve this purpose, the authors have set forth the following objectives: to identify the impact of the sanitary and hygienic suitability of the housing on human health; to establish the significance of the human role in maintaining sanitary living conditions in the housing; to reveal the levels of the housing needs and their impact on human health; to suggest strategic areas of the governments' health care policy in the aspect of meeting the housing needs.

## MATERIALS AND METHODS

The following materials were used while conducting the study of the impact of meeting the housing needs on health care: EU and Ukrainian legislation, mass media reports, statistical data on living conditions in Ukraine, Poland, Germany, court cases on living conditions of individuals in Ukraine, literary sources in the fields of jurisprudence, health care and economics.

The system of general scientific and special methods of scientific research was used to solve the set objectives. The dialectical method became the basic one that made it possible to establish the essence of the research problem, the nature and types of the housing needs, the importance of the housing for both human and public health. The impact of meeting the housing needs on human health was emphasized by the axiological method, which made it possible to identify value categories in scientific research. Its use made it possible to distinguish values in the researched phenomenon. Methods of analysis and synthesis were

used to reveal the relationship between the availability of the housing and adequate living conditions and human health. The differences in the legal regulation for providing the housing needs in different countries have been revealed due to the comparative and legal method. The statistical method was used to analyze statistical data on the spread of global, energy poverty, housing provision. The formal and logical method made it possible to reveal the peculiarities of regulatory legal regulation for meeting the housing needs, in particular for health care.

## REVIEW AND DISCUSSION

The need to identify the impact of housing availability and living conditions on human health stems from the provisions of the document entitled "Sustainable Development Goals", adopted at the UN Sustainable Development Summit on September 25, 2015, for the period up to 2030. 17 Global Sustainable Development Goals, which are an urgent call to action for all countries, are its core element. Thus, addressing poverty and other disadvantages must be implemented alongside strategies that improve health and education, reduce inequality and stimulate economic growth. In particular, the third goal involves ensuring a healthy life and promoting well-being for all people [6]. It is well-known fact that a person spends part of life at home, and therefore living conditions have a direct impact on a person's health situation. Thus, these conditions include: established housing dimensions (minimum living space for a person); quality of building materials; indoor air quality; availability of housing and municipal services; noise level; characteristics of the territory where housing is located, etc.

According to the data of the European Union Agency for Fundamental Rights (FRA), the majority of Ukrainians do not plan to return to Ukraine. Thus, during the survey respondents aged 16+ were asked about their plans for the future. 35% of respondents said that they plan to return home, and 37% would like to stay in their host country. 23% have not decided on their plans yet, and about 4% plan to move elsewhere [7]. Mostly, people do not want to return due to the difficult socio-economic conditions of living in Ukraine, particularly housing conditions.

The issue of returning Ukrainian refugees is one of the debated, because its solution depends both on legal, and political, socio-economic factors. To accomplish this, it is necessary, first of all, to create safe and sufficient conditions for human habitation, to bring them in line with living standards in EU countries. At the same time, it is necessary to solve not only the issue of en-



sure the safety of living, which is caused by the war, but also to improve the quality of living conditions in housing. We are analyzing living conditions in Ukraine and some EU countries.

As of 2021, 46.3% of Ukrainian population lived in separate apartments, 49.3% – in individual houses. Herewith, one room was occupied by: four people and more 8.8%; three persons – 25.8%; two persons – 34.7%. On average, one person accounts for: up to 7.5 m<sup>2</sup> – 7.1%; up to 9.0 m<sup>2</sup> – 5.0%; from 9.01 m<sup>2</sup> to 13.65 m<sup>2</sup> – 22.9%; from 13.66 m<sup>2</sup> to 20.0 m<sup>2</sup> – 27.4%; from 20.01 m<sup>2</sup> to 25.0 m<sup>2</sup> – 12.1% [8].

There is other data in the Republic of Poland. Thus, the housing stock of Poland increased by 40% in 2022. On average, one person in Poland has 31 square meters of living space, according to HREIT, based on data from the Central Statistical Office. The latest figures are 3 meters higher than 5 years ago and 8 meters higher than in 2002. Improvement of new building construction is due to the attraction of individual funds and individual construction [9].

There were about 43.1 million apartments in residential and non-residential buildings, including dormitories in 2021 in Germany. The average living space per apartment in 2021 was 92.1 square meters. Living space per capita (the total allowable area of rooms belonging exclusively to a residential unit) in Germany increased from 46.1 square meters to 47.7 square meters within the period from 2011 up to 2021. It is about 2.5 million apartments more than in 2011 (+6.0%). The actual used residential area was significantly increased by 7.3% during the same period. One of the reasons for that is the ever-increasing supply of houses and large apartments, even though households are getting smaller on average and single-person households become more common [10].

Analyzing the given data, it can be stated that living conditions in Ukraine are lower than in EU countries. At the same time, the provision of housing conditions in Ukraine, aimed at supporting health care is achieved through the establishment of sanitary requirements set forth for housing. Modern sanitary requirements for housing in Ukraine were developed in the 80s of the XX century. They were established for different types of housing depending on climatic conditions, in particular, the minimum sanitary area per person was 9 m<sup>2</sup>.

Modern legislation of Ukraine on housing requirements and living conditions has been significantly updated. Part 4 of the Art. 7<sup>2</sup> of the Law of Ukraine "On Building Regulations" establishes that the main requirements for buildings and constructions are to ensure mechanical resistance and stability, fire safety, hygiene, health and environmental protection, safety

and accessibility during operation, protection against noise and vibration, energy saving and energy efficiency, sustainable use of natural resources. Thus, residential buildings must be designed and built in such a way that they do not pose a threat to the safety of residents or neighbors during the entire life cycle and do not have a significant impact on the quality of the environment or on the climate during their construction, operation and demolition, in particular, as a result of any of the following factors: release of toxic gas; release of hazardous substances into the air inside or outside the premises [15]. The specified requirements are provided in details in the Law of Ukraine "On the Public Health Care System"[12]. Thus, the Art. 31 of the Law states that residential premises in terms of area, design, lighting, insulation, microclimate, air exchange, air condition, as well as noise, vibration, ionizing and non-ionizing radiation levels must meet the requirements defined by state health and sanitary regulations and rules in order to ensure safe and harmless living conditions, regardless of the duration of such living.

The following state sanitary rules related to housing currently exist in Ukraine:

1) State sanitary rules for planning and real estate development of settlements. They established that complex engineering infrastructure, which includes centralized systems of water supply and sewage, heat-, gas- and energy supply, sanitary cleaning and other types of engineering equipment and urban land improvement ensuring the environmental protection and favorable conditions for population living, should be provided in settlements in accordance with the current building norms and regulations [13].

2) State sanitary norms of permissible noise levels in the premises of residential and public buildings and on the territory of residential buildings [14];

3) State sanitary standards and rules for maintaining the territories of populated areas [15].

Establishing sanitary requirements for housing is a modern necessity for ensuring human health. Thus, the COVID-19 pandemic has formulated a number of problems regarding the right to safe housing, namely: the lack of sanitary requirements during the construction of housing in some countries has led to overcrowded living; free penetration of the virus through ventilation systems became one of the factors of the spread of the disease [16]. Housing affects human health through: the size, indoor air quality, safety, accessibility, neighborhoods and area characteristics. Such topical issues as thermal and hygrometric comfort, lighting, noise protection, water supply, and waste disposal have a strong impact on both the psychological and physical health of residents [17].

The Polish Law "Prawo budowlane" [18] establishes that a building (in particular, residential real estate) must meet the following requirements: 1) load-bearing capacity and stability of the construction, fire safety, noise protection, energy saving and thermal insulation and other requirements that are enshrined in the Annex I to the Regulation of the European Parliament and of the Council of European Union No. 305/2011 of 9 March 2011 which lays down harmonized conditions for the marketing construction products and replaces Products Directive 89/106/EEC [19]; 2) operation of the construction object according to its purpose. It is about the supply of water and electricity, removal of sewage, rainwater and waste, the possibility of accessing telecommunication services, etc.; 3) the ability to maintain a proper technical condition and have the necessary conditions for the use of communal facilities and multi-apartment housing construction by the disabled; 4) labor protection; 5) protection of the population in accordance with the requirements of civil protection; 6) protection of objects that are in the register of monuments; 7) appropriate location on the building site; 8) compliance with and respect for the legitimate interests of third parties, including providing access to public roads; 9) safety and health of persons staying in the construction premises (the Art. 5 of the Law) [20]. The above requirements include the presence of sanitary living principles in housing, which are laid during the construction of the housing. At the same time, housing that has been built before the establishment of modern construction standards does not meet the relevant sanitary standards that would ensure safe living conditions.

The Preamble of Regulation (EU) No 305/2011 of the European Parliament and of the Council of European Union of 9 March 2011 which lays down harmonized conditions for the marketing construction products and replaces Products Directive 89/106/EEC determines that the rules of Member States require that construction works be designed and executed so as not to endanger the safety of persons, domestic animals or property nor damage the environment. Member States have introduced provisions, including requirements, relating not only to safety of buildings and other construction works but also to health, durability, energy economy, protection of the environment, economic aspects, and other important aspects in the public interest (clause 4 of the Preamble). When assessing the performance of a construction product, account should also be taken of the health and safety aspects related to its use during its entire life cycle (clause 15 of the Preamble) [19]. The requirements related to the safety of people and the surrounding environment emphasizes the importance

of developing sanitary and hygienic living conditions in housing at the level of a separate state.

Summarizing, we can state that housing must meet sanitary living standards. Sanitary and hygienic conditions of living in housing provide the creation of an environment for human activity, where there is no harmful effect of its factors on human health and there are opportunities to ensure normal and restoration of impaired body functions. These conditions are the integral element of housing suitability, which provides a safe and healthy environment for human habitation. It must be taken into account that living in housing is interconnected with the living of other people. Because of that, the privacy rules of living in housing may be limited by the requirements of safe living, in particular sanitary, hygienic conditions of living. Rules for safe living in housing should be established at the level of the state (basic sanitary living conditions), local self-government agencies (depending on the state of the climate, topography, sanitary and epidemiological situation of a particular area, etc.), individual family, person.

Healthy living in the housing is not always supported at a family level. For example, when identifying circumstances that may lead to deprivation of parental rights in Ukraine, the child's living conditions are taken into account. Thus, one of the court's decisions describes the following improper living conditions for children, which were discovered by specialists of the regional center for social and psychological rehabilitation of children during their visit to the family: unsanitary conditions, lack of bed linen, heating and hot water; cockroaches, bedbugs, dirt and mess in the rooms; non-working refrigerator and bathroom; lack of space for children's studies, activities and games; unusable dishes; lack of daylight in the rooms, etc. [20]. Another court decision describes a situation when a mother tried to take a disabled child from a center for social and psychological rehabilitation of children. After all, during the examination of the child's living conditions, it was established that there is no electricity and gas in the apartment building, there is no way to heat water and cook food; the premises are not heated in winter period; the residence needs repair [21].

Analyzing these and other court cases, it can be established that appropriate and safe living conditions for health depend on the social status of a person, economic opportunities to maintain sufficient conditions for living in the housing. The maintenance of the necessary sanitary living conditions is influenced by the state housing policy, the socio-economic status and the state of health of an individual. Thus, people with health problems, in particular, with a disability status or mental health disorders, including alcoholism, drug addiction, cannot independently meet their own housing needs, the needs

of their family and children. We note that apartments are bought by people who have a stable state of health and income. Therefore, it is necessary to take into account that not every person can maintain the proper living conditions. This provision must be taken into account when developing housing legislation. At the same time, it is necessary to take into account the balance of mutual interests. Thus, if a person does not maintain proper sanitary living conditions, it can affect not only his / her living conditions, but also the living conditions of other people. Here is an example that one of the authors of this article faced. Thus, a person with disabilities and low incomes was cut off sewers in the summer of 2023 in one of the central districts of Kharkiv. As a result, this person was forced to pour own feces from the window of the apartment onto the pedestrian sidewalk. Therefore, the state of sanitary and hygienic living conditions must be considered through the principle of reasonableness and safety of public health, giving it priority over economic interests.

Depending on the availability of meeting the housing needs, the standard of living of society can be determined. Housing need has several types. Depending on the reason for its occurrence, it can be primary, which originates because of the lack of housing for a person (for example, as a result of the destruction of a house; in other cases, when housing loses the ability to meet the conditions of safe living; in case of loss of housing due to fraudulent actions, illness, etc.) and derived one, which arises as a result of a change in life circumstances (for example, moving, expanding the family, the desire to change living conditions, etc.). The housing need may also vary depending on the state of vulnerability of a person. It is about the housing need of: a child; women who found themselves in difficult life circumstances; persons who have experienced domestic violence; internally displaced persons; refugees; persons receiving temporary asylum; persons with disabilities; unemployed.

The primary housing need is the most dangerous for health situation. If a person does not have housing that can provide conditions for meeting the primary needs of a person, then there is a threat to a person's existence as a biological being. If we are talking about the derived housing need, there is a subjective feeling of satisfaction or dissatisfaction with housing as a result of comparing the available housing with the cultural norms of living in a specific society and in a specific time period. The inconsistency of these norms with real living conditions causes awareness of the housing problem and prompts a person to take specific actions to satisfy it [22].

The primary housing need is related to the right to human life and health protection. The lack of housing or its destruction makes a person to be in the state of

dangerous existence. In order to overcome this situation, most countries are developing social housing systems. At the same time, those mechanisms do not always work. Thus, there were only 1,098 social housing apartments and 1,997 temporary housing apartments in Ukraine in January 2021. Unfortunately, a significant part of such housing was on temporarily occupied territories with the beginning of the full-scale war [23].

The situation of social housing in Ukraine is extremely unsatisfactory. Social housing stock was practically not built in the state, which negatively affected meeting the housing need during the war. Non-systematic actions were taken to overcome it. Thus, preparatory works for the construction of eight apartment buildings for patients of the national rehabilitation center "Nezlamni" began in Lviv in June 2023. The uniqueness of this project is that the newly constructed housing stock will belong to the city, which can use it for different needs with the change of circumstances. 90% of wounded civilians and soldiers treated at the "Nezlamni" center are residents of other cities. Depending on the situation (the type of injury and the type of needed treatment) they will be able to live there from six months up to one year.

It is rightly noted in the scientific literature that housing conditions significantly affect the health of both an individual and the community [24]. The most optimal way for the state (from a financial and time point of view) to provide the population with housing is the construction of temporary buildings and towns [25]. At the same time, it is impossible to overcome the primary housing need at the expense of temporary housing. The experience of other countries emphasizes that it is necessary to involve government programs to meet the housing needs, in particular, direct subsidies provided to local authorities for the purpose of building cheap apartments, which are then rented out; various forms to support non-governmental organizations engaged in social construction (subsidies, various types of benefits, etc.); benefits, exemptions, etc., addressed directly to people with low incomes who are trying to get their own apartment [26].

Derived housing need is related to human health care. It is detailed in accordance with dependin on the housing's compliance with technical and sanitary requirements. Thus, the number of people living in one room has a direct impact on human health. For example, the spread of infectious and viral diseases increases due to the crowding of people. Poor housing conditions such as leaking water, poor ventilation, dirty carpets and pest infestations can lead to an increase in mold, mites and other allergens related to poor health. However, not everyone can create safe and sufficient conditions for a person to live in the housing, maintain a proper state of living conditions that would ensure the health of the people who live there.

Therefore, the acquisition of sufficient housing from the point of view of ensuring human health protection for a certain part of the population of Ukraine is only a dream.

In terms of sustainable development of mankind, the issue of developing the general system of affordable housing, which can ensure the support of human health, is especially relevant. At the same time, it is necessary to take into account the impact of different types of housing needs on human health.

It can be argued that there is a direct relationship between the satisfaction of housing needs, a person's sanitary living conditions and the health. It emphasizes the reciprocity of human rights, namely the right to life, health care and housing. Taking this into account, we offer the following strategic areas of the governments' health care policy in the aspect of meeting the housing need: development of state and municipal housing programs; formation of the system of conditions for the sufficient housing; expansion of social housing construction; support of low-income people in the field of adequate housing (benefits, provision of social housing, write-off of debts for housing and municipal services, etc.); continued updating of sanitary and hygienic living conditions in the housing.

## CONCLUSIONS

On the basis of the conducted research, we can suggest the following conclusions:

1. Sanitary and hygienic living conditions in the housing stipulate the creation of a human living environment, where there is no harmful effect of its factors on human health and there are opportunities to ensure normal and restoration of impaired body functions. These conditions are the integral element of housing

suitability, which provides a safe and healthy environment for human habitation.

2. Each person is responsible for maintaining own sanitary and hygienic conditions of living in the housing. Maintaining such conditions has a positive effect on a person's health situation, his / her family and neighbors. However, not every person can maintain proper living conditions, therefore the state of sanitary and hygienic living conditions must be considered through the principle of reasonableness and safety of public health, giving it the priority over economic interests.
3. It has been suggested to distinguish two types of meeting the housing needs: primary and derived. The primary housing need is related to human right to life, protection of human health. Derived housing need is related to human health care. Housing that does not meet the technical and sanitary conditions of suitability can negatively affect a person's health. The derived housing need in contrast to the primary one emphasizes the condition of unsatisfactory residence in the housing.
4. In terms of sustainable mankind development, the governments of countries should elaborate strategies for the development of health care in the aspect of meeting the housing needs, in particular, to develop state and municipal housing programs. Such strategic documents should determine and establish the conditions for adequate housing, expansion of social housing construction, support for low-income persons (allowances, provision of social housing, write-off of debts for housing and municipal services, etc.), further updating of sanitary and hygienic living conditions in the housing.

## REFERENCES

1. Baker E, Bentley R. Housing and health: a time for action. *International Journal of Housing Policy*. 2023;23(2):197-200. doi: 10.1080/19491247.2023.2204650. 
2. Robinson J, Scott AJ, Taylor PJ. Working, Housing, Urbanizing: The International Year of Global Understanding – IYGU. *SpringerBriefs in Global Understanding*. Berlin. 2016. doi: 10.1007/978-3-319-45180-0. 
3. Ukaz Prezidenta Ukrainy №225/2021 Pro rishennya Rady natsional'noyi bezpeky i oborony Ukrainy vid 14 travnya 2021 roku "Pro Stratehiyu lyuds'koho rozvytku" [On the Strategy of Human Development: Decree of the President of Ukraine of 2 June 2021. № 225/2021]. <https://www.president.gov.ua/documents/2252021-39073> [Accessed 14 August 2023] (Ukrainian)
4. Zdrowy dom – zdrowy człowiek, czyli o wpływie domów na nasze zdrowie. 2017. <https://www.planergia.pl/post/zdrowy-dom-zdrowy-czlowiek-czyli-o-wplywie-domow-na-nasze-zdrowie> [Accessed 14 August 2023] (Polish)
5. Szymborski J. Mieszkalnictwo a zdrowie. 2008. [https://wiedza.pkn.pl/documents/14109/17917/pe\\_artykul\\_mieszkalnictwo.pdf/fdc37441-6ff4-426a-92f0-58cd3d5e6458](https://wiedza.pkn.pl/documents/14109/17917/pe_artykul_mieszkalnictwo.pdf/fdc37441-6ff4-426a-92f0-58cd3d5e6458) [Accessed 14 August 2023] (Polish)
6. United Nations. Do you know all 17 SDGs? Department of Economic and Social Affairs. Sustainable Development. <https://sdgs.un.org/goals> [Accessed 14 August 2023]
7. Ukraine Refugee Situation. Operation data portal. 2023. <https://data.unhcr.org/en/situations/Ukraine> [Accessed 14 August 2023]
8. Socio-demographic characteristics of Ukrainian households in 2021. Statistical collection. Kyiv. 2021. [https://ukrstat.gov.ua/druk/publicat/kat\\_u/2021/zb/07/zb\\_cdhd\\_21.pdf](https://ukrstat.gov.ua/druk/publicat/kat_u/2021/zb/07/zb_cdhd_21.pdf) [Accessed 14 August 2023]

9. Statystycznie 31 metrów kwadratowych mieszkania na osobę w Polsce. Większość Europejczyków mieszka wygodniej. <https://nieruchomosci.infor.pl/wiadomosci/5736557,statystycznie-31-metrow-kwadratowych-mieszkania-na-osobe-w-polsce-wiekszosc-europejczykow-mieszka-wygodniej.html> [Accessed 14 August 2023] (Polish)
10. Wohnfläche. <https://www.umweltbundesamt.de/daten/private-haushalte-konsum/wohnen/wohnflaeche#zahl-der-wohnungen-gestiegen> [Accessed 14 August 2023] (German)
11. Pro budivel'ni normy 2009 No. 1704-VI. [On Construction Regulations: Law of Ukraine of 5 November 2009 No. 1704-VI]. <https://zakon.rada.gov.ua/rada/show/1704-17#Text> [Accessed 14 August 2023] (Ukrainian)
12. Pro systemu okhorony zdorov"ya: Zakon Ukrayiny vid 06.09.2022 № 2573-I [On Public Health Care System: Law of Ukraine of 6 September 2022 No. 2573-I]. <https://zakon.rada.gov.ua/laws/show/2573-20#Text> [Accessed 14 August 2023] (Ukrainian)
13. Derzhavni sanitarni pravyla planuvannya i zabudovy naselenykh punktiv: Nakaz MOZ Ukrayiny vid 19 chervnya 1996 r. № 173. [State sanitary rules for planning and building of settlements: Order of the Ministry of Health of Ukraine of 19 June 1996 No. 173]. <https://zakon.rada.gov.ua/laws/show/z0379-96> [Accessed 14 August 2023] (Ukrainian)
14. Derzhavni sanitarni normy dopustymykh rivniv shumu v prymishchennyakh zhytlovykh i hromads'kykh budynkiv i na terytoriyi zhytlovyi zabudovy: Nakaz MOZ Ukrayiny vid 22.02.2019 № 463. [State sanitary norms of permissible noise levels in the premises of residential and public buildings and on the territory of residential buildings: Order of the Ministry of Health of Ukraine of 22 February 2019 No. 463]. <https://zakon.rada.gov.ua/laws/show/z0281-19#Text> [Accessed 14 August 2023] (Ukrainian)
15. Derzhavni sanitarni normy ta pravyla utrymannya terytoriy naselenykh punktiv: Nakaz MOZ Ukrayiny vid 17.03.2011 r. № 145. [State sanitary norms and rules for maintaining the territories of populated areas: Order of the Ministry of Health of Ukraine of 17 March 2011 No. 145]. <https://zakon.rada.gov.ua/laws/show/z0457-11#Text> [Accessed 14 August 2023] (Ukrainian)
16. Avramova O.Ye. Rekodyfikatsiya tsyvil'noho zakonodavstva ta COVID-19 [Recodification of civil legislation and COVID-19]. Problems of civil law and proceedings: reports of the participants of scientific and practical conference; dedicated to the 95th anniversary of the birth of O. A. Pushkin. Kharkiv : Panov; KhNUiA. 2020, pp.114–117. <https://dspace.univd.edu.ua/server/api/core/bitstreams/154bae0b-56f2-4ce5-9e31-072b9b985f79/content> [Accessed 14 August 2023] (Ukrainian)
17. Capasso L, D'Alessandroni D. Housing and Health: Here We Go Again. *International Journal of Environmental Research and Public Health*. 2021;18(22):12060. doi: 10.3390/ijerph182212060. [DOI](https://doi.org/10.3390/ijerph182212060)
18. Prawo budowlane: Ustawa z dnia 7 lipca 1994 r. <https://isap.sejm.gov.pl/isap.nsf/download.xsp/WDU19940890414/U/D19940414Lj.pdf> [Accessed 14 August 2023] (Polish)
19. Regulation (EU) No 305/2011 of the European Parliament and of the Council of 9 March 2011 laying down harmonised conditions for the marketing of construction products and repealing Council Directive 89/106/EEC Text with EEA. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32011R0305> [Accessed 14 August 2023]
20. Resolution of the Supreme Court as part of the panel of judges of the First Judicial Chamber of the Civil Court of Cassation of 8 April 2020, case No. 645/731/18, proceedings No. 61-20399cb19. <https://zakononline.com.ua/court-decisions/show/88834026> [Accessed 14 August 2023]
21. Ukhvala Khmel'nyts'koho mis'krayonnoho sudu Khmel'nyts'koyi oblasti vid 13 travnya 2021 roku, sprava № 686/30244/20, provadzhenyia № 2/686/2105/21. [Decision of Khmelnytskyi City District Court of Khmelnytskyi Region of 13 May 2021, case No. 686/30244/20, proceedings No. 2/686/2105/21]. <https://youcontrol.com.ua/ru/catalog/court-document/97605853/> [Accessed 14 August 2023] (Ukrainian)
22. Kohatko YuL, Poliakova SV. Zhytlovi umovy v iyerarkhiyi potreb naselennya. [Living conditions in the hierarchy of population needs]. *Hlobal'ni ta natsional'ni problemy ekonomiky*. 2017;20: 742-746. <http://global-national.in.ua/archive/20-2017/152.pdf> [Accessed 14 August 2023] (Ukrainian)
23. To provide Ukrainians with affordable housing, the Government is developing preferential programmes Rent to Buy and Social Rent. Gowerment portal. 2024. <https://www.kmu.gov.ua/en/news/dlia-zabezpechennia-ukraintsiv-dostupnym-zhytloom-uriad-rozrobliaie-pilhovi-prohramy-orenda-z-pravom-vykupu-ta-sotsialna-orenda-iuliia-svyrydenko> [Accessed 14 August 2023]
24. Thiele B. The Human Right to Adequate Housing: A Tool for Promoting and Protecting Individual and Community Health. *American Journal of Public Health*. 2002;92(5):712-5. doi: 10.2105/ajph.92.5.712. [DOI](https://doi.org/10.2105/ajph.92.5.712)
25. Reut AH, Kohatko YuL. The housing problem in Ukraine against the backdrop of the 2022 war. *Demography and social economy*. 2022;3(3):123-144. doi:10.15407/dse2022.03.123. [DOI](https://doi.org/10.15407/dse2022.03.123)
26. Tupaj-Cholewa A. Wspieranie zaspokajania potrzeb mieszkaniowych w USA – Community Reinvestment Act. *Studia Biura Analiz Sejmowych. Kancelarii sejmu. Polityka mieszkaniowa*. Red. tomu: Ewa Karpowicz. Warszawa. 2007, p.179-193. [https://orka.sejm.gov.pl/WydBAS.nsf/0/855700463A8FA71FC125734C0035E93E/\\$file/BAS\\_mieszkalnictwo.pdf](https://orka.sejm.gov.pl/WydBAS.nsf/0/855700463A8FA71FC125734C0035E93E/$file/BAS_mieszkalnictwo.pdf) [Accessed 14 August 2023] (Polish)

## CONFLICT OF INTEREST

The Authors declare no conflict of interest

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