# SUPPORT TO UKRAINE FOR DEVELOPING A MODERN PUBLIC HEALTH SYSTEM

A project funded by the European Union and implemented by a consortium consisting of GFA Consulting Group GmbH, Hamburg, and the Finnish Institute for Health and Welfare, Helsinki.

The project continues its activities to assist Ukraine with a focus on advancing its progress towards EU accession under Component 1 and supporting the establishment of a modern Blood Safety System under Component 2.

Project Newsletter December 2023



The European Commission released a Report "Ukraine 2023" as of 8th of November 2023, as part of the EU enlargement package, that contains conclusions on public health, such as:

# Maryna Slobodnichenko

Deputy Minister of Health of Ukraine for European Integration

- There has been some progress in the adoption of the Law of Ukraine "On the Public Health System" and its implementing legislation, but the legislation remains partially aligned with the EU acquis, for example, in relation to communicable and non-communicable diseases and cross-border health threats;
- Ukrainian legislation on communicable diseases and serious cross-border health threats is partially aligned with the EU acquis. It is necessary to develop implementing legislation to ensure effective prevention, preparedness (e.g., there is no universal epidemic preparedness plan) and emergency response plan;

 The national legislation of Ukraine on blood, tissues, cells and organs is partially aligned with the EU acquis. The donor blood tracking and reporting system has not been fully developed yet. Ukrainian legislation is not aligned with the EU acquis on cells for in vitro reproduction. There are no regulations on inspections of medical assisted reproduction centres.

Since 2019, the Ministry of Health of Ukraine have been collaborating with the project "Support to Ukraine for developing a modern public health system". We particularly appreciate technical assistance provided by the project in the reform of public health system in Ukraine and in improving quality and safety of donor blood and blood components. The COVID-19 pandemic and Russian aggression made that period particularly challenging, and the project support made a valuable contribution to the efforts of the Ministry of Health and the overall health system in Ukraine.

During the next two years we are looking for continuation of our collaboration, particularly through assistance in preparing/changing the regulatory framework, including required EU approximation, i.e. through supporting the development of laws, bylaws, CabMin resolutions, and MoH orders required to fully ensure alignment with the EU requirements (implementing relevant EU legislations).

In addition, we are looking forward for the project support to study visits of Ukrainian public health professionals to relevant international public health and to support collaboration between Ukraine and ECDC, DG-Santé and other relevant EU-public health entities.

In the area of blood safety system in Ukraine, we are looking for continuation of the project support through providing assistance in preparing a regulatory framework, including the required EU approximation, capacity building of the UTCC through trainings, workshops, on-site visits, assistance in setting up donor registries and promotion of voluntary donors, assistance in setting up an automated information management system and other important aspects of blood safety.

We would like to express our gratitude to the Delegation of European Union to Ukraine for standing with the people of Ukraine and provide all the assistance needed to support legal and technical development required to fully ensure alignment with the EU acquis in public health and blood safety areas in the coming years.

# Continued cooperation on approximation of Ukrainian legislation with the EU acquis

Team leader had several productive meetings with the top management of the Ministry of Health and the Public Health Centre. As a result, the Ministry of Health provided the Project with its vision of the priority areas of cooperation and a list of public health sectors that require more attention.

Deputy Minister Ms Maryna Slobodnichenko hopes it will serve as the foundation for further collaboration. Considering MoH's urgent needs she suggested the following forms of interaction:



#### Technical assistance in legal approximation

The Project will provide technical assistance to accelerate and support the European integration processes in the healthcare sector, through development of legislation required to fully ensure the alignment with the EU requirements in the following areas:

- Public health, including the prevention and control of communicable and noncommunicable diseases and cross-border health threats;
- Medical services, including cross-border medicine;
- Digitalisation of the healthcare system, including the legislative implementation of EU legal acts regulating the implementation of electronic registers and information bases.



The Project will organize webinars with participation of European experts as speakers to explain the mechanisms of implementing EU healthcare acquis (directives and regulations).



#### Webinars for the European Commission

The Project will support MoH in conducting webinars for the European Commission, where will present MoH's representatives developments and results in the implementation of EU law. This format will allow them to enhance the dialogue with colleagues from the European Commission.

### Conference on the Results of the European Commission Report

The project will support the organization of a conference with the participation of representatives from the European Commission and MoH Ukraine to discuss the "Ukraine 2023" report dated November 8, 2023. During this event, MoH will share the vision of European integration planning and use it as an opportunity to discuss the recommendations of the European Commission.



#### Trainings for MoH employees

The project will facilitate the organization of offline training sessions with direct interaction with EU experts. The training would cover topics such as medical device, cross-border healthcare, quality and safety of blood and human tissues and cells and counteracting cross-border threat.



# Implementation status and challenges of EU standards in blood safety

On 06 of October, the project key expert on blood safety, Dr. Mohammed Farouk, participated in a conference organized by the Ministry of Health of Ukraine and Ukrainian Transplant Coordination Center as part of the International Medical Exhibition "Public Health 2023".

This annual conference is an important event fostering the efficient and full-fledged functioning of the country's medical system. The exhibition creates a professional space for the exchange of knowledge and experience between professionals, facilitates medical the establishment of partnerships, helps to find new business opportunities, as well as highlights the challenges that exist for healthcare in the context of war and post-war recovery. More than 150 doctors and experts took part in the conference this year.

The current focus in the blood safety area is on the establishment of a sustainable, self-sufficient national system, reducing the number of unnecessary transfusions through patient blood management, effective clinical use of blood components, and safety of blood donors, components and patients.

Dr. Farouk delivered two presentations dedicated to the topics of implementation of good practice guidelines in the functioning of blood system establishments in the EU countries and requirements for traceability and hemovigilance in the European Union. It was highlighted that having such operating systems in place shall facilitate the proper organisation, provision and standardisation of transfusion care in healthcare

facilities and haemovigilance and traceability for transfusion reactions of donors and recipients.

The participants and speakers discussed, among other, topics of state oversight the activities of blood system entities; licensing of blood system entities; responsible storage and delivery; transformation of the Ukrainian blood system: main directions and challenges.

It is worth to underline that the Ukrainian government has adopted an order which will allow appropriately trained combat medics to administer blood transfusions at a pre-hospital stage. For this purpose, the Health Ministry is expanding a special training programme on the basics of transfusion therapy. During the training course, combat medics will acquire the skills required for blood transfusion.

Therefore, the joint work on transforming the system and implementation of the requirements and standards for the safety and quality of donor blood and its components, good practices, traceability, and haemovigilance as per EU requirements, shall continue.



# Lessons learnt by UTCC and competent authority professionals during 2023 spring study visits and trainings



Hnativ Ivan, Deputy Head of the Department, Head of the subdivision for certification of medicinal products manufacturing at the Department of licensing of medicinal products manufacturing, blood and certification at the State Service of Ukraine on Medicines and Drugs Control, PhD in Chemistry, GMP/GDP inspector.

Pavliuk Artem, doctor, transfusion specialist at the department of coordination of transfusion assistance at Specialized state institution "Ukrainian transplant coordination center".

**Lutsenko Polina,** laboratory medicine MD of the laboratory support department at Specialized state institution "Ukrainian transplant coordination center".



What is your main insight from the study visits and online trainings?

#### **Hnativ Ivan:**

In general, the development of state institutions is extremely important and, in my opinion, it is achieved through continuous training, modernisation and fruitful interstate cooperation. In order to provide employees with the necessary qualifications to carry out state supervision (control) in the area related to the procurement, testing, processing, storage, distribution and sale of donor blood and blood components intended for transfusion of donor blood and blood components, State Service of Ukraine on Medicines and Drugs Control, in cooperation with MoH, initiated the organization of trainings for inspectors the experience of relevant using international organisations and institutions.

As of today, representatives of the Ukrainian inspectorate did a number of trainings on good practice guidelines for the blood system entities and hospital blood banks, with a special focus on the quality management system. The acquired knowledge was useful for the development of regulations and national standards. This relates to such legal acts and guidelines as: "Good practice guidelines for blood system entities and hospital blood banks"; "Instructions for inspectors on inspection of blood system entities (including hospital blood banks) and blood plasma banks"; "Dossier for facilities procuring plasma by apheresis method"; "Dossier for blood plasma banks".



#### Pavliuk Artem:

During the study visits, we got acquainted with the organisational structure, principles of management of the Swiss blood system, information principles and mechanisms of regulation of the blood system in Switzerland, as well as the organisation of the blood Portugal, the functions system in performed by the participants of the and the subordination system participants to ensure the continuous provision of transfusion care, traceability and haemovigilance, and aspects of legal support of the blood system in Portugal.

In both Switzerland and Portugal, the state, through a competent authority, establishes the regulatory framework that regulated the activities of blood system entities and healthcare facilities providing transfusion services. The competent authority ensures the provision of high-quality and safe transfusion care at medical institutions. All activities of the blood system are carried out in accordance with the requirements of the European blood safety directives and local regulations, which are regularly updated and reviewed.

Taking into account the experience of these countries and our desire to comply with the best international practices, we are now building a similar model in Ukraine, which will improve the quality and safety of transfusion care in our country. Thanks to these study visits and online trainings, I was able to visualise for myself how the system works in these countries, which shall facilitate the transformation of Ukraine's blood system.

#### Lutsenko Polina:

At the EFI conference and study visits in the field of transfusiology, I was most impressed by the development of immunogenetic research aimed to ensure safety and effectiveness of transfusions. Particular emphasis is placed on studying the genetic characteristics of both recipients and donors, which is extremely important for reducing the risk of an adverse immune response of the patient during blood transfusion, which plays an important role if there is a need for subsequent transfusions. The HLA and HPA systems play an important role in transfusiology, allowing for personalised donor selection, ensuring optimal compatibility and minimising the risk of negative immunological reactions during transfusion of blood and its components.

I was also impressed by the individual donor-recipient matching, which is a key step in transfusiology aimed at ensuring compatibility and minimising the risk of negative reactions. The key aspects of this process include HLA compatibility and consideration of HPA in platelet transfusion. Individual selection of a donor-recipient pair is based on an indepth study of the genetic and immunological characteristics of each individual. It is also important to take into account possible risk factors, recipient's medical history and the specifics of the reaction to previous transfusions.



Did you manage to build partnerships with host institutions, launch a joint project, establish a long-term support or mentoring programme?

#### Pavliuk Artem:

During the visits, it was possible to meet and exchange contacts with many experts in various fields - donor recruitment, procurement and processing of donated blood and blood components, donor blood testing, quality management and good practices in blood establishments that have developed the blood system in their countries and achieved significant success.

The representatives of the Portuguese Institute of Blood and Transplantation (IPST), which coordinates and regulates transfusion and transplantation activities in Portugal, expressed their readiness for long-term partnership and support. Thanks to the established contacts, we are able to consult and receive technical advice on the organisation and coordination of the blood system, invite colleagues to participate in conferences and share experiences.

#### Lutsenko Polina:

The working contacts were with representatives of the Laboratory of Histocompatibility and Immunogenetics at the blood system entity in Porto. Agreements were reached to continue communication with experts and doctors in the field of laboratory services, in particular, on immunohematological studies of blood donors (especially with regard to blood systems such as Daffi, Lewis, MNS, etc., which have not yet been implemented in Ukraine) and studies at the molecular genetic level (HLA, HPA for more accurate matching of donor-recipient pairs).

During the EFI conference we have met and established a good working contact with the President of the American Society of Histocompatibility and Immunogenetics (ASHI). Currently, the possibility of conducting training on phenotyping of blood recipients and donors based on flow cytometry for Ukrainian specialists is being discussed with the professor.

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What practices from the online and offline trainings that took place in the spring of 2023 do you already use in your work?

#### **Hnativ Ivan:**

In order to regulate the frequency of scheduled state supervision (control) over compliance with the requirements for conducting the relevant type of business activity, the State Administration on Medicines and Drugs Control is developing a draft CMU Resolution "On approval of criteria for assessing the degree of risk for conducting business activities".

Together with the Ministry of Health of Ukraine, we developed amendments to the Code of Administrative Offences to establish administrative liability for violation of the requirements to the procurement, testing, processing, storage, distribution and sale of donor blood and blood components and to assign to the State Service of Ukraine on Medicines and Drugs Control the authority to impose an administrative penalty if the relevant offence is committed for the first time.

And, of course, it is worth to mention the elaboration of licencing conditions for conducting business activities for the procurement and testing of donor blood and blood components, regardless of their final use, processing, storage, distribution and sale of donor blood and blood components intended for transfusion.

I would like to say that only in partnership with professional and active people who share a common aim it is possible to achieve the goals set. And I would like to emphasise that building a functional blood system in Ukraine and establishing a proper control of the activities of blood system entities is one of the priority areas for the State Service of Ukraine on Medicines and Drugs Control.

#### Pavliuk Artem:

Thanks to the online training on the basics of inspection by the competent authorities of the European Union, it was possible to understand better from the experts of the European Blood Inspection System Academy (EuBIS Academy) how the licensing and inspection of blood system entities in the EU is organised and carried out, ensuring the compliance with regulatory requirements and quality standards, GMP guidelines by blood participants. Given our system commitment to achieve the highest standards, Ukraine is currently taking preparatory measures to introduce licensing of blood establishments and subsequent their inspection compliance with all requirements of the current legislation harmonised with the European directives in the area of blood donation, safety and quality of donated blood and blood components.

This may include HLA typing, genetic variations and antibody analysis. We are also working on the possibility of amending the regulations to take into account the latest methods of determining blood groups using different systems. This may include the use of molecular genetic methods to improve the accuracy of the results, as well as the introduction of requirements to determine genetic variations in the HLA and HPA systems and their impact on the transfusion reaction.

Taking these aspects into account in the regulations will allow for the improvement and personalisation of the transfusion process, contributing to the safety and effectiveness of this important medical procedure.



What relevant programmes, ideas, examples and lessons did you learn from the training sessions?

#### Lutsenko Polina:

Given the possibility of implementing the knowledge gained in the area of laboratory support for transfusiology, we are considering the development of standards that define the mandatory immunogenetic testing for donors and recipients before transfusion.

#### Pavliuk Artem:

For us it was interesting to see the example of promoting and attracting donors in Portugal, where under the national programme the promotional materials are created constantly and streaming services and TV channels are involved.

A good example was the successful cooperation with the FOX TV channel. Using the premiere of the new season of the popular TV series "The Walking Dead", a national donor recruitment campaign was created with incentives of branded gifts from FOX, which had a good response from donors and allowed to significantly increase the number of blood donations.

#### Lutsenko Polina:

In order to adopt international experience and practices to develop a national network of blood reference laboratories, the strategy for the development of reference blood laboratories in Ukraine should include the following elements:

 Standardisation and quality: implementation of international standards, updating the regulatory framework.

- Implementation of quality control systems to continuously monitor and ensure the accuracy of test results, as well as the implementation of an external quality control system.
- Providing laboratories with modern equipment and reagents.
- Automation and digitalisation of processes in laboratories. Implementation of laboratory information systems.
- Creating a network of cooperation:
  Development of a national network of reference laboratories through active cooperation with laboratories at different levels of the healthcare system.
- Exchange of experience: Holding regular national and international meetings to share experiences and implement best practices.
- Development of training and professional development programmes for laboratory technicians and healthcare professionals.
- Organise internship opportunities in identified international reference laboratories.

# Highlights of the VNRBD campaign in Ukraine

Every day, patients with surgeries, injuries and oncological diseases, pregnant women and newborns need blood components to receive proper medical care and in times of war the need for blood products is multiplied as our defenders also need blood components.

As of 28 February, 2022 a strategic blood reserve was created in Ukraine. However, blood needs change almost every day. Since the beginning of the full-scale Russian invasion, the Ministry of Health has been recommending that people register for donation in advance, as this allows



to plan the appointment of donors, avoid queues at blood centres and replenish stocks depending on the needs. Regular blood donation ensures the uninterrupted use of the reserved blood stocks.

In most cases, blood components are used for emergency medical care, so a person's life depends on the availability of their stocks in blood centres. During the war, blood donation became one of the country's defence lines. Despite the air raids, donors saved and continue to save patients' lives, and according to WHO, 1 blood donation can save up to 3 lives. During the previous periods, the campaigns "Your blood can fight. Become a donor" and "There are no holiday in war. Your blood will fight" were launched by MoH and UTCC and supported by the EU project "Support to Ukraine for Developing a Modern Public Health System" and a group of NGOs. Currently, the project is continuing the cooperation with the Ministry of Health and the UTCC in supporting a national voluntary unpaid donation campaign that will help to build a long-term commitment to regular donation: a one-time donation should become a regular donation. Additional attention will also be paid to improving the efficiency and professionalism of blood centres' staff working with donors.

## **Interview**

## Andrii Korzh

acting head of the blood centre at the National Military Medical Clinical Centre "Main Military Clinical Hospital"

Acting head of the blood centre of the National Military Medical Clinical Centre "Main Military Clinical Hospital" of the Ministry of Defence of Ukraine, PhD in Medicine, transfusion specialist of the highest qualification category,



doctor in healthcare organisation and management with many years of practical, scientific and managerial experience in the field of transfusion and experience as an expert in the areas of transfusion, quality management systems of blood system entities, auditor of quality management systems.

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What are the main goals of the national blood system development and how were they transformed over the martial law?

The full-scale war caused by the Russian invasion of Ukraine changed our lives drastically. And despite all the horrors. demonstrating real miracles - miracles of unity. courage, and resilience. One of the many challenges faced by the national healthcare system under martial law was the constant need in donor blood and blood components. The intensity of the hostilities in Ukraine necessitates saving the lives of a significant number of civilians and military personnel, often in out-ofhospital settings, and blood transfusion is required as a life-saving measure before the wounded are evacuated to a medical facility in a safer location.

The main objectives of the national blood system development still remain unchanged, namely:

- ensuring that the needs of healthcare institutions are met with safe and highquality donor blood components in sufficient quantities;
- promoting a culture of voluntary unpaid donation of blood and blood components regulated by a proper legal protection of donors, their conscious and voluntary participation in the donation process;

- standardisation, integration and optimisation of processes at all stages in the area of donation of blood and blood components;
- transparent, consistent and effective management of the system aimed at providing the population of the country with blood and blood components;
- access to safe and high-quality donor blood and blood components, by maintaining the essential stocks:
- ensuring proper blood testing and maintaining the quality of blood and its components, including compliance with haemovigilance, traceability and biosafety standards during the processing of blood and components;
- ensuring fair, appropriate and rational clinical use of donor blood and blood components.

In the context of the armed conflict, the infrastructure of the Ukrainian blood system has to respond intensively and quickly to the challenges of procurement, processing, testing and transportation of donated blood and blood components. During the martial law, the need for donor blood components for the Armed Forces of Ukraine has significantly increased, with the specific conditions related to the distance, timing and conditions of transportation of blood components, so activities that support the national response to war-related threats have become a priority, given the importance of ensuring sufficient stocks of donor blood and blood components, their rational redistribution and uninterrupted supply of donor blood and components to places of active use.

The infrastructure of the military healthcare system, which has its own blood centres and facilities for the procurement, processing,

testing, distribution and transportation of donated blood and blood components, began to work closely with the civilian healthcare sector, as there is a constant need to attract new blood donors, most of whom are civilians. And the ability to provide life-saving transfusions of donated blood and blood components has serious implications on many levels, with a significant impact on individual morale and, at higher operational and organisational levels, on the overall support of personnel and force sustainment. The blood system as a whole therefore has the strategic importance for a country in an armed conflict.

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How did the dynamics of blood donation change after the start of the full-scale invasion and how is this process now adjusted?

Starting 24 February 2022, a large number of citizens responded to calls to donate blood and blood components and actively participated in donation. Most of them became regular donors and continue to donate to this day. The Ministry of Health of Ukraine, together with the Ukrainian Transplant Coordination Centre, an EU-funded technical assistance project, NGOs and other partners, help to organise and implement nationwide campaigns to attract voluntary, non-remunerated blood donors.

The war has demonstrated the consolidation of Ukrainian society, that unites not only the military and civilians in the combat zones, but also the home front which is a reliable support for the frontline. Since the introduction of the martial law regime, there has been a significant increase in the number of people willing to donate for the first time, as well as the number of donations from so-called reserve donors who usually do not regularly visit blood centres. Also, at the beginning of the full-scale invasion, the number of donations from active donors who regularly donate blood and its components increased significantly. Unfortunately, today we see a decrease in the number of donations from active donors. The main reasons for this may be due to logistical problems - periodic difficulties with safe access to blood centres for donors due to the proximity of hostilities; threats of sabotage; frequent air, rocket and artillery attacks on the civilian sector; war-related internal displacement and emigration of the population (especially women), as well as conscription of active donors into the Armed Forces or other law enforcement agencies.

Thus, the availability of the required number of donors and, accordingly, stocks of donated blood and blood components, as well as their efficient logistics, play a significant role in the medical support of the armed forces during war.



How the safe blood donation process and transfusion services are ensured during the wartime?

Since the first days of the full-scale war, the blood centres have been taking measures to ensure the safety of donation in the face of rocket and artillery fire to ensure the planned donation and the safety of the donors themselves at the highest possible level.

In order to ensure the safety of donation, with the participation of partners - the NGO DonorUA - an online registration system for donors and persons who have expressed a desire to become donors has been established, which is used by the blood system entities. Donors can also contact the blood center by phone to find out about their donation needs. Likewise, the employee of the blood center will inform the donor about the need for donation and, if necessary, provide information on preparation for donation and the main contraindications to donation.

Special attention is paid to donor safety during air raids. During air raid alerts, donors accompanied by staff are going to prepared shelters, which significantly slowed down the process of receiving, medical examination of donors, and procurement of donated blood and blood components, but donors are loyal to this situation. Special attention is paid to antisabotage security. Since the start of the fullscale invasion, we decided not to use social media for donor recruitment.

Among main sources of donor recruitment, we can count on active donors, donors-employees and their relatives or friends, activation of blood donation volunteers, involvement of donors from related organisations based on preliminary lists of those willing to donate blood. Measures were taken to ensure the safety of processing and stocks. An additional set of measures was developed and implemented to ensure the continuity of the production processes and preservation of the stocks of blood components in view of close combat operations and the threat of shelling and bombing, as well as the threat of power outages.

In order to resolve the issues of transfusion care directly at the combat zones and adjacent territories, as well as for those affected by shelling, in accordance with the approved regulations, the use of O(I) Rh-negative preserved donor blood was launched at the prehospital and early hospital stages with the simultaneous determination of group and Rh status of such patients. And subsequent transfusions were carried out taking into account the determined group and Rh status. This enabled the prevention of the transition of severely wounded patients to a group of patients with poor survival prospects, which helped to save the lives of seriously wounded servicemen.

In addition, transportation of donated blood and blood components to their destinations is organised and ensured in accordance with the needs. It is the logistical and technical support for the supply of donated blood and blood components to the armed forces in the context of hostilities that is of tactical importance. This a critical strategic impact on the preservation of forces and the maintenance of military morale. According to the NATO Medical Doctrine (NATO Standard AJP-4.10 Allied Joint Doctrine for Medical Support), the supply of blood and blood components is defined as a critical function of medical logistics.

How quickly was it possible to adapt the staff of blood establishments to new realities?

With the outbreak of full-scale war, of course, there were significant difficulties in organising the uninterrupted operation of the blood centre, as with most healthcare facilities.

Some of the civilian staff had to immediately evacuate their families and children from the war zone. Everyone worked around the clock, seven days a week. A few weeks later, when the situation near Kyiv began to improve, the blood centre's civilian staff was able to return to work almost in full capacity.

Despite the challenging situation and the psychological and physical pressure of the first weeks of the war, the blood centre staff got reunited, worked hard and continues to work today to provide military healthcare facilities and soldiers in the active combat zone with safe and high-quality donor blood components to save lives. Civilians affected by the hostilities are also in need of donated blood and components. The war has not cancelled scheduled emergency surgeries, cancer and complicated childbirth. The significant need for donated blood will remain steadily high until our victory, and we all have a responsibility to do our part to bring this victory closer, each one working at its place.

What support do you expect from the 'Support to Ukraine for developing a modern public health system' project in terms of the EU experience integration into blood safety reform?

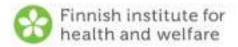
Personally, I would like to thank the colleagues from the EU technical assistance project for their support and assistance in reforming the blood safety system and, of course, I look forward to continuing such cooperation in the future. In my opinion, important aspects of assistance and support to the blood system in Ukraine includes:

- assistance in changing the financial and economic model;
- implementation of a single information space of the blood system and creation of a national register of blood and blood components donors;
- amendments to the national statistical reporting;
- assistance in implementing a communication campaign to recruit and engage blood and blood component donors to ensure a stable flow of donors in peacetime, martial law and emergency situations;
- implementation of changes to the haemovigilance, traceability and biosafety systems;
- support in establishing a system for managing national stocks of donated blood and blood components, raw materials and consumables;
- support in establishing a system of management of donated blood and blood components at all levels in the context of shortages of donated blood and blood components in peacetime, martial law and emergency situations;
- assistance in preparing and supporting healthcare facilities to provide transfusion services for donor blood components;
- support for the management of the blood transfusion system across the country through the use of information technology to facilitate donor recruitment and donor scheduling for donations.









This publication was produced with the financial support of the European Union. Its contents are the sole responsibility of the project "Support to Ukraine for Developing a Modern Public Health System" and do not necessarily reflect the views of the European Union.

The overall project's objective is to support the modernisation and development of a sustainable Public Health System that is able to ensure disease prevention and control standards in line with EU legislation, requirements, and practices. The project shall contribute to strengthening national leadership and capacity in Public Health policy programming and implementation. The project continues its activities to assist Ukraine with a focus on advancing its progress towards EU accession under Component 1 and supporting the establishment of a modern Blood Safety System under Component 2.