

GENERAL DIRECTORATE OF BLOOD SERVICE

2024

ANNUAL REPORT



CONTENTS

Organization Chart of the
General Directorate of Blood Services / 3

DEPARTMENT OF MEDICAL SPECIALIZATION MANAGEMENT - 4

Scientific and Technological Research Office / 5

2.DEPARTMENT OF MEDICAL MANAGEMENT -15

Medical Operations Management Office/ 16

Blood Donor Management Office / 26

3.DEPARTMENT OF FINANCIAL AND SUPPORT SER- VICES- 39

Support Services Office / 40

Financial Affairs Office /42

4.DEPARTMENT OF QUALITY AND STRATEGIC MAN- AGEMENT - 45

Quality Management Office / 46

Business Continuity Office / 54

Statistics / 58

**GENERAL DIRECTORATE OF
BLOOD SERVICE**

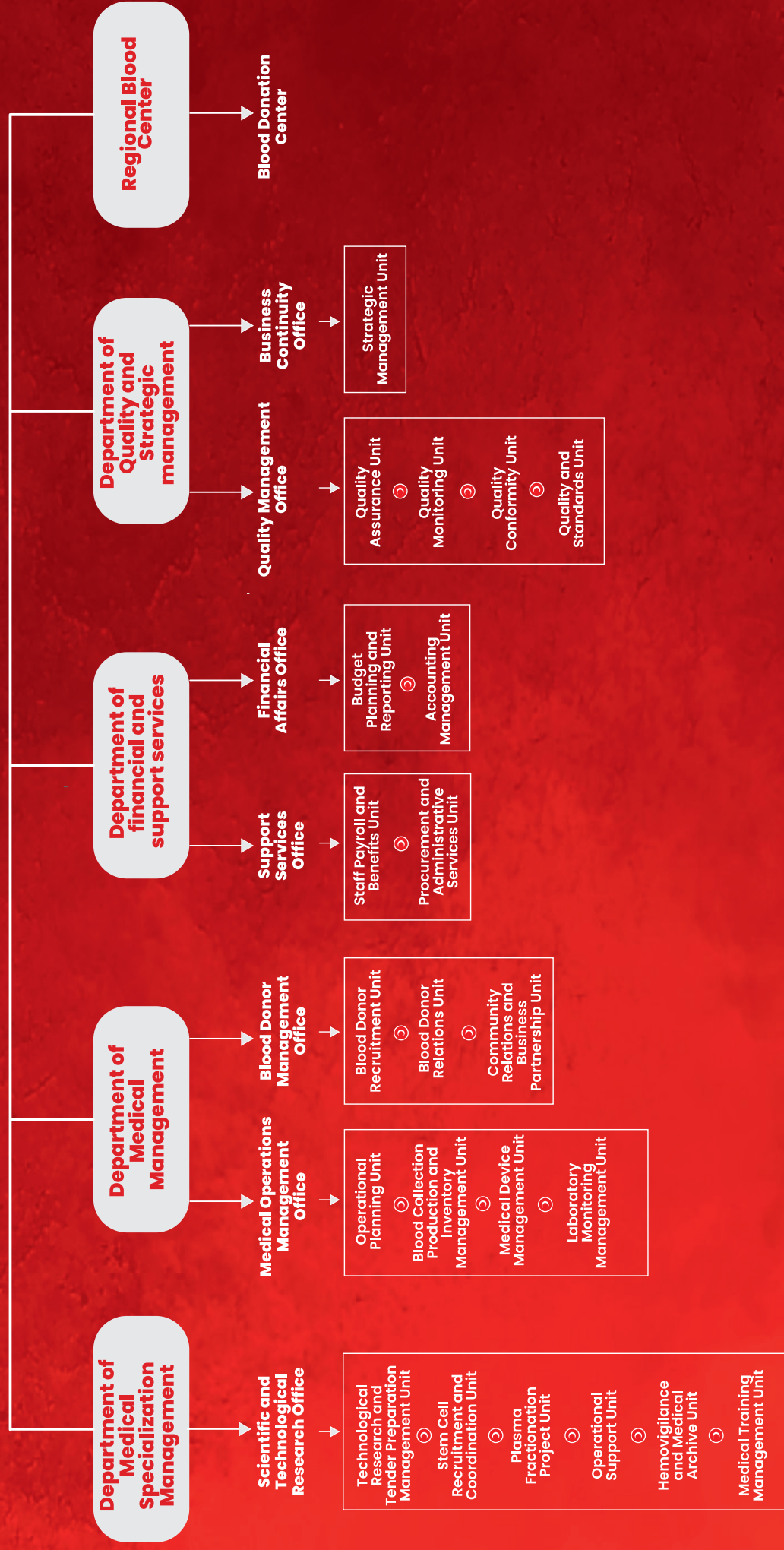
2024

ANNUAL REPORT



General Directorate of Blood Services

**Blood Services
General Manager
Advisor**



DEPARTMENT OF MEDICAL SPECIALIZATION MANAGEMENT





SCIENTIFIC AND TECHNOLOGICAL RESEARCH OFFICE

1. Activities of Technological Research and Tender Preparation Management Unit

This unit is responsible for coordination and monitoring of procurement process of the medical consumables and devices to be procured within their limits of authorization to meet the needs of blood service units, coordination of the commission works, keeping abreast with the national and international standards on the technical and administrative matters related to the materials to be procured, keeping up with the national and international technological developments in the blood services, and conducting necessary research.

The unit coordinates the annual online institutional subscription to the Transfusion, Transfusion Medicine and Vox Sanguinis journals, frequently cited as authoritative in the field of Blood Banking and Transfusion Medicine, in order to keep close tabs on the recent developments and scientific studies. This unit coordinates the effective participation in the national or international conference, congress, seminar,

workshop, etc. events in the field of Blood Banking and Transfusion Medicine.

The oral presentations/poster presentations to be drawn up by our staff internally for presentation at the scientific events such as conference, congress, symposium, workshop, etc., or the scientific papers for publication in the academic journals, as well as external joint study proposals are reviewed by our Directorate General and the Presidency of Kızılay Academy. Study proposals that are found content-appropriate are scrutinized by Non-invasive Studies Ethics Committee for scientific research and publication ethics. A list of the presentations delivered by the Institution at national and international meetings, as well as papers published, during 2024 are provided below.

Presentation Name	Presentation Type	Presentation Owner
Current Data from Turkish Red Crescent: Serology and NAT Data of Turkish Red Crescent Laboratories	Panel Address / ABCT Congress	Specialist Dr. Mehmet Bakır SAYGAN
Current Data from Turkish Red Crescent: Immunohematological Test Data of Turkish Red Crescent	Panel Address / ABCT Congress	Specialist Dr. Özgür R. GÜNER
Current Data from Turkish Red Crescent: Services Provided by Turkish Red Crescent at Transfusion Centers	Panel Address / ABCT Congress	Dr. Levent ÇAKIR
Quality Practices in Blood Banking and Transfusion Medicine: Audit Mechanisms in the Blood Banking and Transfusion Medicine Practices and Accreditation Survey	Panel Address / ABCT Congress	Sibel ELDEMİR
Actors in Hemovigilance: Hemovigilance Practices in Regional Blood Centers	Panel Address / ABCT Congress	Dr. Ahmet Serdar HEPGÜL
An estimation on the likelihood of blood donors to donate again	Oral Presentation/ ABCT Congress	Sıdika Selin Çöplü, Nazlı Nadire Sözmen, Ali Erkan, Levent Sağdur, Saim Kerman, Güçlü Ongun, Baha Sofuoğlu, Fatma Meriç Yılmaz
Behavioral tendency of blood donors: A survey	Oral Presentation/ ABCT Congress	Eda Çetiner, Nazlı Nadire Sözmen, Şükrü Çağlak, Metin Kalender, Levent Sağdur, Saim Kerman, Fatma Meriç Yılmaz
Modeling the employment of quality assurance specialists in regional blood centers	Poster Presentation/ ABCT Congress	Emre Korkmaz, Didem Ünal, Ali Erkan, Sibel Eldemir, Fatma Meriç Yılmaz
Blood supply in unexpected and extraordinary situations	Turkish Journal of Hygiene and Experimental Biology	Muhsin Yıldırım, Soner Yılmaz
Behavioral Characteristics of First-Time Blood Donors in Türkiye: An Extensive Analysis of the Theory of Planned Behavior Model	TRC Journal of Medicine/ Article	Nazlı N. Sözmen, Mustafa Ulukanlıgil, Şükrü Çağlak, Selin Çöplü, Kerem Kınık, Fatma Meriç Yılmaz

Turkish Red Crescent also supports academic studies. Postgraduate studies, research projects, graduation projects, etc. joint study proposals submitted internally and externally are reviewed and evaluated by Turkish Red Crescent Directorate General and the Red Crescent Academy Presidency. Appropriate study proposals are also evaluated by the Non-Invasive Research Ethics Committee in terms of scientific research and publication ethics. A list of external studies received in 2024 that are evaluated as appropriate is provided below

Institution	Study Title	Study Type
Recep Tayyip Erdoğan University Faculty of Medicine	The Effect of Blood Donation on Erythrocyte Health: A review on miRNA 142, miR-451/144 Levels	Research Study
Ankara Etlik City Hospital	Comparison of the Frequency of Borna Disease Virus (BDV) Infection in Patients with Bipolar Mood Disorder and Major Depression and Healthy Blood Donors	Research Study
Ankara University Biotechnology Institute	Evaluation of False Positivity in Blood Donors Using Machine Learning Algorithms	Doctoral Dissertation
Marmara University Nursing Department	Determining the Attitudes of Individuals with a Family History of Hypertension to Prevent Hypertension	Research Study
Ankara Etlik City Hospital	A study investigating the relationship between Toxoplasma gondii infection and bipolar disorder using the seromolecular method.	Research Study
Ankara Etlik City Hospital	A study of the frequency of human herpesvirus 8 infection in type 2 diabetes patients and blood donors	Research Study
Ankara Etlik City Hospital	Prevalence of Human Herpes Virus 8 in Schizophrenia Patients and Blood Donors: A Single-Center Study	Research Study
Ankara Etlik City Hospital	Prevalence of Human Herpesvirus 8 in Kidney Transplant Patients and Blood Donors	Research Study

Technical specifications, technical document review and inspection committees are established as part of preparation for the procurement of medical devices and consumables needed by Blood Service Units, contributing to the procurement process. Support is provided to the relevant purchasing-selling structure on scientific and technical matters during and after the tender process. In 2024, technical specification, inspection and technical document review committees were established for 22 procurements, and preparation of technical specifications for goods and services procurements was ensured.

Requests for blood and blood components that are not suitable for clinical use from institutions and organizations conducting R&D studies, quality control material production and similar studies are evaluated in terms of legislation, content and science. Contracts for the supply of blood and blood components not suitable for clinical use have been signed with 7 institutions/organizations.

Activities of Hemovigilance and Medical Archive Unit

Hemovigilance activities, which enable the epidemiological follow-up of blood donors and adverse reactions and events that occur in the blood donor or recipient, and aim to prevent the recurrence of adverse reactions and events, are carried out by the Hemovigilance and Medical Archive Management Unit of the Department of Scientific and Technological Research at the level of the Blood Services Directorate General.

Hemovigilance studies are carried out in accordance with the procedures and principles specified in the "National Hemovigilance Guide" issued in 2016 and the "Instructions for the Management of Situations Threatening Blood Safety, Adverse Events Associated with Blood Donation, and Donor Reactions as part of Hemovigilance," "Instructions for Screening-Verification and Hemovigilance in Infectious Tests," and "Screening-Verification and Hemovigilance Process in Infectious Tests."

In this context, when the agent is found positive in the screening tests performed on blood taken from donors by Regional Blood Centers and this is verified by verification tests, the donor is rejected and all donations made in the year before this donation are considered risky and tests are applied to the replicate samples of these donations or, if necessary, to new samples taken from donors according to the relevant algorithms. Accordingly, appropriate measures are taken by the relevant Regional Blood Center and the necessary notifications are made to the relevant hospitals, Provincial Health Directorates and the Ministry of Health of the Republic of Türkiye. If an infection that occurs in a patient who has received a blood transfusion is reported to the Regional Blood Center by the relevant hospitals, the Regional Blood Center returns the transfused components to the donors and carries out activities to prevent the components obtained from the donor's blood from posing a risk. In addition, donor reactions and transfusion reactions are also reviewed as part of Hemovigilance, and measures are taken to prevent the recurrence of serious undesirable events and effects.

Necessary assignments have been made to manage the relevant activities by the Hemovigilance Units that are planned to be established in the Regional Blood Centers in accordance with the legislation. All activities of the Hemovigilance in Regional Blood Centers and the preparation of information and documents that will form the basis of the legal processes related to them have been carried out by the staff assigned to Hemovigilance Units since 2016. The necessary assistance and guidance on all these issues is provided by the Hemovigilance and Medical Archive Management Unit of the Blood Services Directorate General.



Activities of Medical Training Management Unit

Medical Education Management Unit ensures the planning and implementation of the necessary training programs to promote the knowledge, skills and competencies of the staff of Blood Services Directorate General and Blood Service Units (RBC/BDC) and to ensure that the staff carry out their duties effectively, efficiently and in compliance with regulatory acts, national guidelines, in-house directives and quality management system standards.

Blood Banking and Transfusion Medicine Certification Trainings

The Ministry of Health has authorized the University Hospitals and Training and Research Hospitals in Istanbul, Ankara, İzmir, Adana and Antalya provinces as training centers to open and implement Blood Banking and Transfusion Medicine Certified Training Programs. Applications were made through the Provincial Health Directorates to the Certified Training Programs, enabling

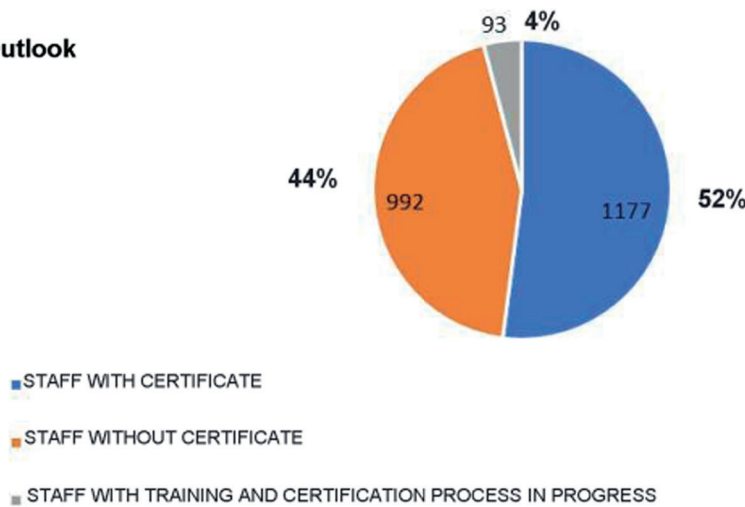
the staff without certification to participate in the training programs and receive certification.

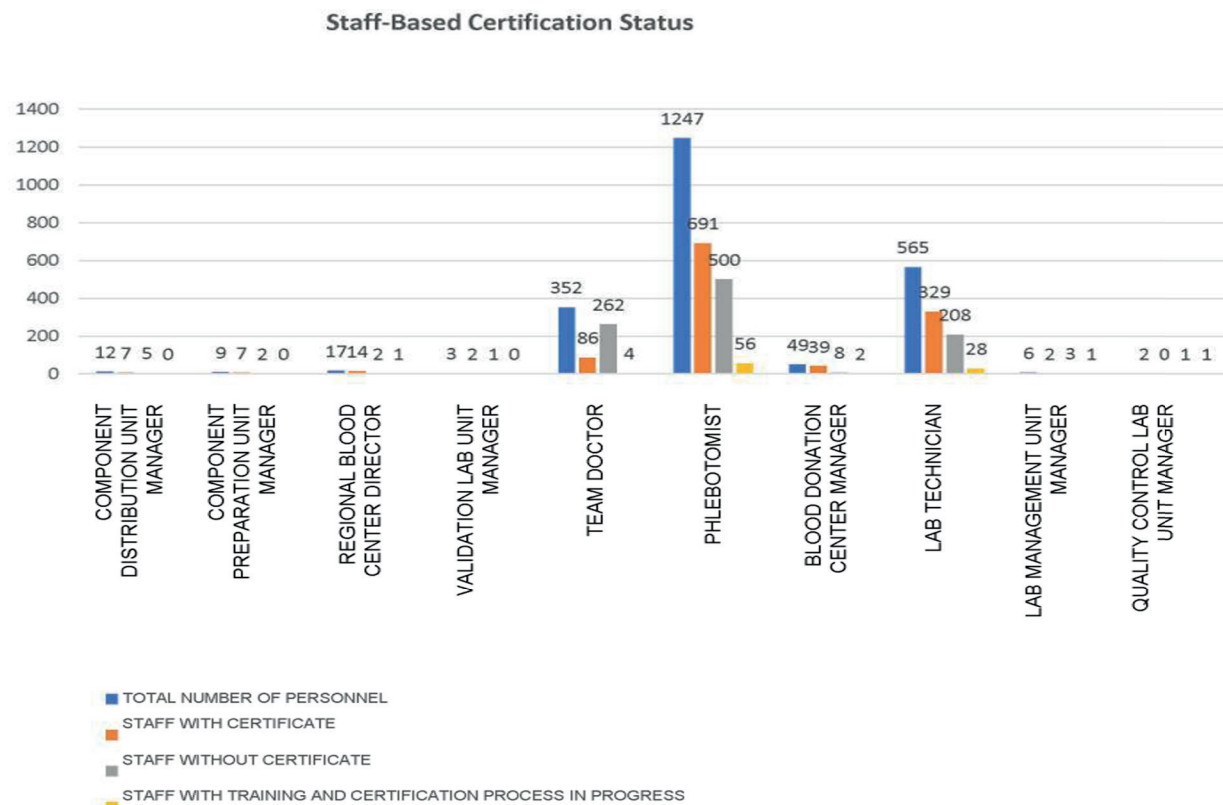
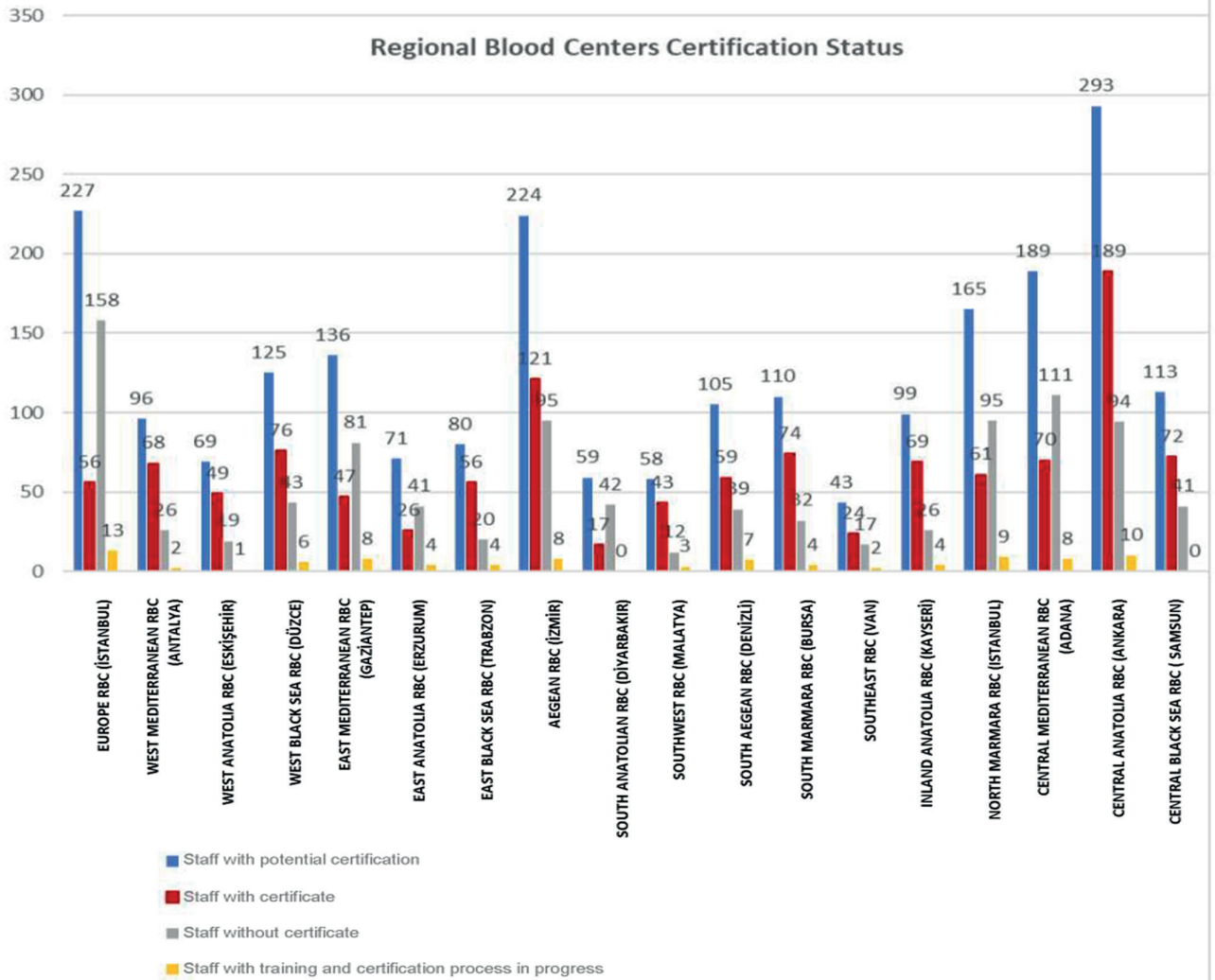
The certificates of staff holding Blood Banking and Transfusion Medicine Certificates, working in Regional Blood Centers and Blood Donation Centers affiliated with the Blood Services Directorate General, were renewed, and certificate acquisition processes were carried out for the staff who did not have a certificate.

Blood Banking and Transfusion Medicine Certification Training Centers and Attendees in 2024

Training Place	Specialist Doctor	General Practitioners to workat the Blood Donation Center	Staff to work as Laboratory Staff in Blood Service Units	Staff to work as phlebotomists in blood service units	Total
Ankara	2	17	14	51	84
Istanbul	0	1	15	20	36
Antalya	0	0	3	0	3
Adana	0	0	2	9	11
İzmir	0	1	6	14	21
Total	2	19	40	94	155

Certification Outlook





In-House Training Activities

In-house training at the Blood Services Directorate General is carried out under three main areas: orientation, re-orientation and in-house training. While re-orientation and in-house training are provided by the region where the staff work, the theoretical parts of the orientation training are delivered by the North Marmara Blood Center (Istanbul), Aegean Blood Center (İzmir), Central Anatolia Blood Center (Ankara) and Central Mediterranean Blood Center (Adana), which are designated as orientation centers; practical training is provided by the Regional Blood Center where the staff work.

Since the last quarter of 2020, the orientation, re-orientation and in-house training of all staff working and starting to work at Regional Blood Centers and Blood Donation Centers affiliated with the Blood Services Directorate General are organized with standardized programs for each position.

In addition, plans were made in cooperation with the Training Department to improve the competencies of trainers working in training activities at the Blood Services Directorate General and affiliated Blood Service Units, and Trainer Training was provided to 61 staff during the year. Individuals who have completed the Trainer Training are certified as trainers by the Training Department within the following year.

TRAININGS PROVIDED IN 2024				
REGION NAME	Number of staff who attended orientation training	Number of staff who attended re-orientation training	Number of in-house trainings	Number of staff who attended in-house training*
DGBS:	11	18	70	311
Europe BC (Istanbul)	126	211	1002	11383
West Mediterranean RBC (Antalya)	16	36	324	3659
West Anatolia RBC (Eskişehir)	10	19	362	4374
West Black Sea RBC (Düzce)	17	46	354	4438
East Mediterranean RBC (Gaziantep)	45	86	410	7996
East Anatolia RBC (Erzurum)	15	32	186	2089
East Black Sea RBC (Trabzon)	5	73	275	4068
Aegean RBC (İzmir)	60	36	457	7342
Inland Anatolia RBC (Kayseri)	13	148	143	1832
South Anatolia RBC (Diyarbakır)	13	0	46	650
Southwest RBC (Malatya)	6	17	207	1781
Southeast RBC (Van)	15	36	196	2131
South Aegean RBC (Denizli)	19	15	186	4825
South Marmara RBC (Bursa)	29	54	273	4520
North Marmara RBC (Istanbul)	48	70	1124	7431
Central Mediterranean RBC (Adana)	8	50	242	4567
Central Anatolia RBC (Ankara)	37	69	235	4096
Central Black Sea BC (Samsun)	13	77	830	4982
TOTAL	506	1093	6922	82475

*The figures in the marked column represent the number of people attended in the trainings, but do not represent the number of employees.

Activities of Plasma Fractionation Unit

Project For Deriving Plasma Products from Local Plasma

The physical and chemical processes carried out to separate plasma proteins from the liquid part of the blood, plasma, and to purify them into standard human medicine are called plasma fractionation. The group of drugs obtained through plasma fractionation is called plasma products.

Plasma fractionation products are an important and strategic group of drugs used to strengthen the immune system in some blood diseases, especially hemophilia, some infectious diseases and immune system disorders, and are often the first and sometimes the only treatment option in the treatment of life-threatening diseases.

In 2013, a decision was made to establish a domestic fractionation facility in our country by transferring the necessary knowledge and experience to ensure the country's self-sufficiency in the field of plasma products, to collect sufficient quantities of high-quality and safe domestic plasma, and to process these plasmas in domestic facilities to produce the necessary human drugs. The Red Crescent took an active role in the studies initiated under the leadership of the Ministry of Health, conducted research, prepared feasibility reports and a Plasma Supply Plan, and participated in protocol studies.

These studies were launched in 2014 with the "Plasma Products Derivation Project Protocol" signed between the Ministry of Health and Turkish Red Crescent. The protocol was revised in 2015 and on 19.05.2017, the "Plasma Products Derivation Project Protocol" was revised once again and re-signed between the Social Security Institution, the Ministry of Health and Turkish Red Crescent. In the relevant protocol, Turkish Red Crescent was designated as the raw material provider of the

relevant project.

The contractor that will establish and operate the facility to produce plasma products was selected by the Social Security Institution, and the "Plasma Products Production Project Agreement" dated 15.09.2017 was signed between said contractor and the Social Security Institution.

The preparation period of the Red Crescent began after Social Security Institution commission approved all relevant contracts signed by the contractor and officially notified the Red Crescent of this approval. Afterwards, the Red Crescent initiated the works in line with its plans to produce high-quality and safe plasma for fractionation purposes in accordance with national/international criteria and to successfully pass the necessary audits.

For the project, Regional Blood Centers were visited on-site, needs analyses were conducted, and the North Marmara (Kartal, Istanbul) Regional Blood Center and then the Central Mediterranean (Adana) Regional Blood Center were selected as the pilot region.

The main activities initiated in the areas subject to audit are as follows:

- Updating the Blood Banking Information Management System, validating the software and maintaining the validation status.
- Updating the Quality Management System, validating the software and maintaining the validation status.
- Updating the Temperature Monitoring System, validating the software and maintaining the validation status.
- Validating Laboratory Computerized Test Systems and completion of method validations of tests.
- Establishment of a Qualification Team and completion of training.



-Completion of the qualification processes of cold rooms and all necessary devices.

-Reviewing the instructions and other documents in line with the project, making necessary revisions, canceling some documents and preparing new instructions and other documents as needed.

-As part of the project, training on newly created and revised instructions/documents, in addition to training given/received on new devices, training on subjects such as GMP, Quality Management, Deviation Management, Change Management, Risk Management, FMEA, Hygiene, Calibration, Qualification and Validation, Medical Laboratory Quality and Competence Standard, Basic Certification, Basic Staff Training.

-As part of the Plasma Fractionation Project, reviewing of all processes such as transportation of whole blood and test tubes, storage, processing of whole blood and test tubes, deep-freezing of the obtained plasma, quarantining, release, storage, packaging and delivery to the contractor in order to improve product quality and meet national/international requirements. For the same purpose, comprehensively defining all processes related to the cold chain, and reinforcing the cold chain by carrying out the necessary temperature studies. In this context, procuring the Plasma Transport Trucks and defining the transportation processes between warehouses.

-Making improvements in traceability of donations, products, devices and staff.

-Continuing the purchasing processes for the necessary devices, vehicles, equipment, plasmas and cold cabinets for control samples, etc. within the framework of the plans made.

-Constructing cold rooms for fractionation plasmas, air-conditioned warehouses for sample storage cabinets, and air-conditioned areas for packaging/palletizing operations, as needed.

The process is completed for the North Marmara and Central Mediterranean Regional Blood Centers making them ready for audits by both Fractionator and EU authorities. Between 11-20 October 2021, North Marmara RBC and Central Mediterranean RBC and their affiliates were audited by EMA, and between 22 November and 02 December 2021, Contractor was audited by the Fractionator Company. Finally, the North Marmara and Central Mediterranean RBC and its affiliates were audited by the Ministry of Health (TMMDA) between 7-17 December 2021, and the national/international audits of the relevant regions has been completed.

Following successful audits, the North Marmara and Central Mediterranean RBC centers were certified for FDP production, paving the way for the export of FDPs produced in these centers to EU countries as part of toll fractionation.

Preparations for the audits were completed at Central

Anatolian RBC and European RBC, and the Central Anatolian RBC was audited by Fractionator on 18-22 July 2022 and European RBC on 21-25 November 2022. Between 11-19 January 2023, Central Anatolian RBC and between 20-28 January 2023, European RBC and its affiliates were audited by EMA. Central Anatolia and European RBC and its affiliates passed the audits and the annual plasma capacity suitable for fractionation has reached approximately 150 thousand liters.

Preparations for audit have been completed at the Central Black Sea RBC and Central Anatolia RBC. In this context, the Central Black Sea was audited by RBC Fractionator on 23-26 October 2023 and the audit was completed successfully. Although it was reported that the Central Black Sea RBC and Central Anatolia RBC would be inspected by EMA in addition to the Fractionator audit of the Central Anatolia RBC in 2024, no audit took place.

As part of the Project, preparations for the audit of the West Anatolian RBC have been completed and the Southern Aegean RBC has been included in the Project. Building/needs analyses were carried out to include the Ege RBC in the project scope, and due to the inadequacy of the existing building, necessary works were initiated for the construction of a new additional RBC building.

Preparations for the audits of the mentioned RBCs as part of the Plasma Fractionation Project are continuing according to the plans.

In accordance with the protocol and contract, the search for suitable buildings for the opening of Plasmapheresis Centers was concluded, and the Contractor and the Red Crescent have agreed on 3 buildings (2 in Istanbul, 1 in Adana). The contract for the renovation of the buildings as a Plasmapheresis Center was negotiated between the parties and the necessary construction/renovation and procurement procedures were initiated by the Contractor. Currently, the Contractor declared that the three buildings in question are ready for handover to the Red Crescent as a Plasma Donation Center and the necessary procedures for the handover process were completed between the parties.

In order to start accepting plasma donations at Plasma Donation Centers, the centers must successfully pass the audits carried out by the relevant national and EU authorities and the Fractionator, and the centers must be certified by these authorities. For this reason, studies and negotiations are continuing with the Ministry of Health for the necessary regulatory acts and regulations. In addition, preparations for the audit continue with intensive, long-term, and financially burdensome work such as determining processes, conducting temperature studies, transport verification, writing instructions, preparing new software, software integration and validation, device qualification, staff recruitment and training.



Activities of Stem Cell Donor Recruitment and Coordination Unit

The TÜRKÖK Project was launched by the Ministry of Health of the Republic of Türkiye to establish a Bone Marrow Bank for patients requiring Hematopoietic Stem Cell Transplantation treatment in Türkiye, to identify potential donors who wish to volunteer to donate bone marrow or peripheral stem cells, and to ensure coordination between Apheresis Centers and Transplant Centers. In order to implement the project effectively, the Implementation Assistance Protocol for Voluntary Stem Cell Donor Recruitment as part of the TÜRKÖK Project was signed in cooperation with the Ministry of Health of the Republic of Türkiye and Turkish Red Crescent on 07 November 2013, where Turkish Red Crescent has undertaken Stem Cell Donor Recruitment task. These activities are carried out by the Stem Cell Donor Recruitment and Coordination Unit and 16 Stem Cell Donor Centers (SCDC) established within Turkish Red Crescent Blood Services Directorate General.

Stem cell donor recruitment targets are determined annually by the Ministry of Health of the Republic of Türkiye. Stem Cell Donor Recruitment Goal was set at 120,000 for 2024. As the delivery of 120,000 samples is completed in September 2024, the realization by the end of 2024 is 107,219. Since the beginning of the project, 1,190,971 stem cell donor candidates have been recruited, increasing the number of active donors up to 1,174,195. 63% of the stem cell donors were male and 51%

were between the ages of 18-35. 70% of donors donated stem cells along with their blood donations.

In addition to the Stem Cell Donor Recruitment, Turkish Red Crescent also monitors the matching and transplant planning processes.

With TÜRKÖK becoming a member of the World Bone Marrow Bank (WMDA) in 2016, stem cell products have become available from our country to patients abroad.

As a result of the screening and matching studies conducted by the TÜRKÖK Bone Marrow Bank of the Republic of Türkiye Ministry of Health, 26,533 matching requests were sent to us, with the number of matches for 2024 as 5,424. In 2024, 1,018 individual stem cells were collected.

To date, during the matching process, 1,704 donors have given up on becoming stem cell donors due to reasons such as personal, family, desire to know the patient, dissatisfaction with the process, distrust of the system, financial expectations and refusal to accept the stem cell collection method. The number of donors who opted out in 2024 was 333.

In addition, 6,158 donor candidates have been inactivated from the system and removed from the screening list due to reasons such as health problems, death, or moving abroad. As of this year, 1,926 donors have been inactivated from the system and removed from the screening list.

2024 STEM CELL DONOR RECRUITMENT RATES	
SOUTHWEST SCDC	1,80%
WEST ANATOLIA SCDC	2,90%
EAST BLACK SEA SCDC	3,50%
SOUTH AEGEAN SCDC	4,10%
CENTRAL ANATOLIA SCDC	4,50%
WEST MEDITERRANEAN SCDC	4,70%
SOUTH MARMARA SCDC	4,80%
WEST BLACK SEA SCDC	5,00%
CENTRAL MEDITERRANEAN SCDC	6,00%
SOUTH ANATOLIA SCDC	6,20%
NORTH MARMARA SCDC	6,60%
EUROPE SCDC	6,70%
CENTRAL ANATOLIA SCDC	6,80%
EAST ANATOLIA SCDC	9,20%
CENTRAL BLACK SEA SCDC	9,30%
AEGEAN SCDC	17,90%

Activities of Operational Support Unit

In line with the institution's vision, strategy and goals, as well as Turkish Red Crescent's principle of international standards, this unit is established on 1 August 2019, under the Medical Operations Management Office to provide support in operations and software. Operations Support Unit has 3 staff including the manager.

In line with the institution's vision, strategy and objectives, the unit is responsible for planning of all technical processes related to blood component preparation, defining the roles in the unit, and managing all production processes in an efficient and high-quality manner in accordance with regulations and standard operation procedures in coordination with relevant units.

- It ensures the creation of new instructions concerning the unit, which must be prepared within its operational structure since its establishment, and evaluation of document revisions requested.
- In order to ensure safe blood supply, it ensures that blood donation processes and component preparation processes are carried out in accordance with the standards specified in the national guide with relevant instructions.

Many requests for revision of instructions and related forms, including the beginning of the relevant blood collection process and the component preparation process, have been considered. Revision requests were evaluated in terms of necessity, as a result of which necessary changes and revisions that are found appropriate have been made in the relevant documents (process/guidance and instructions).

In 2024, 46 of the documents included in the Blood Quality Management System were revisited in the relevant instructions and forms due to document revision requests or expiration of the review period. At the same time, changes were made to the system based on the revisions.

- It carries out relevant studies when necessary in terms of blood safety and quality in the creation of relevant documents. (For example: While creating the Butanediol Plate Container Instructions, relevant studies were carried out to determine the storage conditions and durations of Butanediol Plates and included in the instructions, etc.)
- It takes part in committees and commissions regarding blood donation processes and component preparation to be established by the Blood Services Directorate General and/or supports committee/commission work in the areas of planning and implementation.
- It responds to the relevant calls sent by the Red Crescent Technology Service Desk to our unit as a "Key User". Any potential problems in the Hemonline software system at any stage of blood collection were evaluated based on requests from Regional Blood Centers, and changes to the software were

made in coordination with Information Technologies. 3,295 requests received through the Support Desk were evaluated and forwarded to the Information Technologies for resolution.

- Necessary commissions were established to comply with the changing technological standards regarding the Disposal Guide in line with the Unit's "Roles, Authorities and Responsibilities" and due to the changes that occurred, and the Disposal Guide was reviewed and renewed.
- It also manages the purchasing and inspection processes required for operations of the unit.
- Due to the increase in the number of blood donations over the years in 18 Regional Blood Centers and Blood Donation Centers and the inadequacy of the physical archives in the relevant places, a service procurement agreement was signed with the archive company on 18.10.2022, and based on this, transfers are carried out from the regions to the Central Archive at intervals. The unit monitors this process, and manages correspondences related to this process monitoring.
- Coordination was ensured in forwarding archive-related correspondence and archive disposal lists sent from the regions to the Documents and Archives Office.
- The unit participates in technical, scientific and educational workshops, congresses and meetings organized by Turkish Red Crescent on Blood Banking and Transfusion Medicine, starting from the planning phase.
- Privacy Notice and Explicit Consent Form regarding the blood and blood product processes, which are included in the Blood Donor Questionnaires and have legal significance, were prepared under the coordination of the Quality Management Office and Turkish Red Crescent Directorate General and added to the forms.
- It played a role as an intermediary in the communication and resolution of requests between Information Technologies and the department to which the unit was affiliated.
- As part of the Audit Management System, improvement activities are carried out for the nonconformities or deviations detected in the unit.
- It takes part in the improvement activities initiated for the nonconformities detected as part of the quality management system, in the committees for deviation notification, satisfaction notification, complaint notification and document preparation, etc.
- It takes part in the actions to be taken as a result of the decisions adopted at the Management Review Meeting.
- Other roles are also carried out by the Operations Support Unit in line with regulations defined by and as assigned by Blood Services Directorate General, Department of Medical Specialization Management.

DEPARTMENT OF MEDICAL MANAGEMENT





BLOOD DONOR MANAGEMENT OFFICE

Blood Donor Relations System Activities

Activities of Blood Donor Relations Unit

Blood Donor Relations System Activities

Online Blood Appointment System

Online Blood Appointment System is developed and made available to users in May 2020 so that blood donors can donate blood at the nearest blood



11.769

Number of appointments booked online

15.600

Current number of users of the Mobile Blood Donation Application

donation point at the most convenient date and time for them and to check their blood donation information.

During 2024, 11,769 online appointments were made for the Blood Services blood donation.

Turkish Red Crescent Mobile Blood Donation App

We follow developing technology to increase the number of interaction channels with our donors. For this purpose, Turkish Red Crescent Blood Mobile App, compatible with IOS and Android devices, was launched in 2021. In this process, new developments have been added to the app for users in order to improve its functionality. Services offered to users through the mobile app;

- Profile creation/update
- Donation information
- Nearest blood donation point
- Online blood appointment
- Directions to the blood collection team with whom an appointment scheduled.
- Creation of blood type card
- Survey
- Contact Form
- Notification

Currently, 15,600 users actively use Turkish Red Crescent Mobile Blood Donation App.

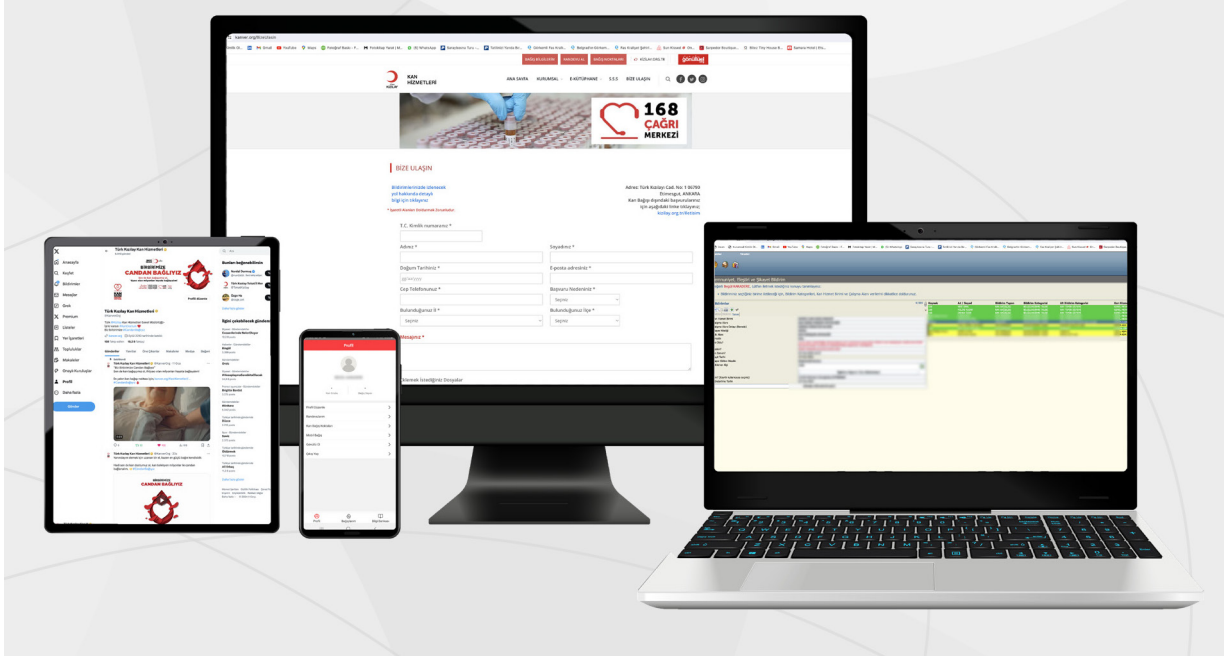
Blood Services Satisfaction, Criticism and Complaint Management (SCC)

The feedbacks from blood/stem/plasma donors, institutional donors, staff and donor candidates are important for the evaluation of the services of Turkish Red Crescent Blood Services Directorate General. The feedbacks received by the call center team and not answered due to their authority are directed to the Blood Services Directorate General. The feedbacks reviewed by the Blood Donor Relations Unit are forwarded to the relevant Blood Service Units. External feedbacks are handled in the shortest time depending on their significance in accordance with TS EN ISO 10002:2018 Customer Management Satisfaction Standard. Feedback channels are as follows.

- www.kizilay.org.tr Turkish Red Crescent official website
- www.kanver.org Blood Services official website
- 168 Call Center
- CIMER (Presidential Communication Center of the Republic of Türkiye)
- Official correspondence

- Turkish Red Crescent Mobile App
- Blood Donation Mobile App
- Phone
- Social Media (Facebook, Twitter, WhatsApp, Instagram, ŞikayetVar) Accounts
- Comment and Suggestion Form
- E-mail

During 2024, 15,620 satisfaction, comment and suggestion forms regarding Blood Services activities were received.



Activities of Community Relations and Business Partnership Unit

Tailor-Made Projects

The "Turkish Blood Donation League" project, launched with the slogan "Are you a supporter of Kindness, Sportsmanship, Friendship, and Blood Donation?", is one of the exemplary projects that has succeeded in bringing a sense of unity to the concept of competition in football with a different approach and encouraging society to donate blood. In the social fan campaign, every blood donation made by fans for their team is instantly displayed on the official Turkish Red Crescent Blood Services website at www.kanver.org.

Institutional Blood Donation Collaborations

Protocol processes are planned and finalized by Turkish Red Crescent with many institutions for development of activities in the field of Blood Services and the

recruitment of voluntary blood donors. In this way, it possible to increase regular blood donations on a national basis and plan regular team performances. In this regard, as of the end of 2024, cooperation protocols have been signed with a total of 182 institutions and organizations. Activities are actively planned and carried out with 86 institutions and organizations to recruit volunteer blood donors.

World Blood Donor Day/Blood Donor Medals

Every year, June 14th, the birthday of Nobel laureate Karl Landsteiner, who discovered the ABO blood group system, is celebrated as "World Blood Volunteers Day" all over the world. Turkish Red Crescent Blood Donation Centers also organize ceremonies on World Blood Volunteers Day to boost the motivation of blood donors and to honor them



Activities of Blood Donor Recruitment Unit

Community Training

The Unit organizes and provides training to the community to inform and raise their awareness on blood donation. These trainings, called “Blood Donor Recruitment” trainings are carried out in convenient venues such as public and private institutions and mosques.

Ministry of National Education Trainings

As part of “Recruiting Future Blood Donors”, educational activities have been carried out in educational institutions under the Ministry of National Education since 2006. In this context, primary, secondary and high school level training prepared for the Ministry of National Education is provided to students, parents and school staff.

University Education

By organizing “Blood Donation Awareness Workshops in Universities,” the foundation for social benefit was laid, achieving a significant progress in reaching safe, regular and unconditional blood donors. These workshops are organized by Regional Blood Centers every year in November–December. Donor Recruitment and educational activities at universities are carried out in coordination with these students throughout the year.

In 2024, 2,084 training activities were carried out,



reaching out 944,752 persons.

As part of Blood Donor Recruitment Activities;

Campaign Activities as part of National Campaign

We have been collaborating constantly with schools and universities under Ministry of National Education, which are among our institutional blood donors, since 2006.

Studies carried out with the Ministry of National Education;



The protocol for the Implementation of Voluntary Blood Donor Training and Recruitment Activities was signed and implemented between Turkish Red Crescent and the Ministry of National Education of the Republic of Türkiye on 08.08.2006. As part of this protocol, training is provided to teachers, parents and other employees of Provincial and District National Education Offices and affiliated units throughout the country, ensuring that they become voluntary, regular and informed blood donors. Between 2014 and 2016, these activities were carried out as part of “Recruiting Future Blood Donors Project” in cooperation with the Ministry of Health, the Ministry of National Education and Turkish Red Crescent through a European Union project and appreciated as an exemplary study on the international platform. “Recruiting Future Blood Donors Project”, which has been expanded nationwide, has now been further strengthened by transforming it into projects developed locally by regional blood centers. As part of blood donation activities carried out with the Ministry of National Education and its affiliated schools, 1,199,469 units of blood have been collected by 26,519 blood donation teams to date. To ensure the sustainability of blood donation activities carried out with the Ministry of National Education, projects implemented locally by blood donation centers were reviewed and examples of good practice were identified, initiating the dissemination process nationwide in 2022.

There is a Campaign in My School!

Meeting the country's entire blood need and ensuring its sustainability is only possible through regular blood donations. In this journey we embarked on with the principle of "Blood is not an urgent need but a constant need," it is important to contribute to the awareness of preschool, primary and secondary school students who have not reached the age of blood donation, about blood donation and how they can become future blood donors, in order to ensure that blood donations continue uninterrupted. It is also extremely important and necessary to ensure that students at primary and secondary school levels convey the awareness they have gained about blood donation to their parents and encourage them to donate blood. Thanks to the campaigns carried out in schools and spread throughout the country, it will be possible for preschool, primary and secondary school students to donate blood in the future by raising their awareness today.

We are aware of the fact that tendencies developed in childhood become ingrained, while the positive tendencies acquired by the child also affect the parents. In this way, children will be made aware of the importance of blood donation and will be able to direct their families to donate blood.

As part of disseminating good practice examples, the "There is a Campaign in My School" project was chosen as the umbrella project in order to standardize the implementation method of Future Blood Donor Recruitment activities throughout the country and thus to increase number of blood donors.

This project aims to raise awareness among school administrators, teachers, other employees, students and parents of students in Provincial and District National Education Offices and affiliated units under the umbrella of the Ministry of National Education of the Republic of Türkiye, about voluntary and regular blood donations, and to encourage them to become voluntary blood donors today and in the future.

As part of "There is a Campaign in My School!" campaign implemented in collaboration with the Ministry of National Education;

- In 2024, 2,759 teams were formed which collected 170,469 units of blood.

Activities in Collaboration with Universities;

The aim is to mobilize young people between the ages of 18-25 to raise their awareness about blood donation and to encourage them to become "Voluntary and Regular" blood donors. The campaigns, started in 2005 and 2006 under the name "University Students Donate Blood," have been continued under the name of Goal 25 since 2007.

All the activities carried out at universities since its inception aim to increase blood donation rate in the



population that are eligible to donate blood and, more importantly, the recruitment of regular blood donors at a young age. The Project Goal 25 was transformed into an international project in 2016 under the European Union Grant Programs and implemented under the chapter of 'Protection of Consumers and Health' as part of European Union's 4th Term Civil Society Dialogue Grant Program, featuring in the international platform.

Until 2019, the Blood Services Directorate General organized regular workshops every year with the participation of approximately 100 university students and Regional Blood Donor Recruitment Staff. These activities, coordinated by Blood Donor Recruitment Staff and Regional Blood Donor Recruitment Planning Staff, continued in coordination with Blood Donation Centers in line with the plans of the Regional Offices as the number of universities and the students have increased significantly.

As part of blood donation activities carried out at universities to date, 2,054,016 units of blood have been donated by 47,781 blood donation teams. In 2024, 2,723 teams collected 118,731 units of blood donations.

Gonulluol.org Volunteer Recruitment Activities;

Volunteering contributes to ensuring the continuity of human development and thus to supporting the

continuity of social development. Volunteer activities directly contribute to the formation of a strong society as they provide examples of the sense and behavior of helping each other, sharing, solidarity, and teaching.

Gonulluol.org is an online volunteering platform. The digital system, which will allow all units of the Red Crescent family to manage their volunteer processes through a single system, also functions as a social communication network.

The system is also designed as a social meeting point where people who want to volunteer can register, receive orientation and training in the volunteer areas of their choice, participate in volunteer activities that suit their region, interests and qualifications, and share information about these activities.

As part of Blood Donor Recruitment, the gonulluol.org platform has been put into use as of 2021. In this context;

- To date, 2,468 positions have been opened by blood service units in the gonulluol.org system, and 3,467 volunteers have applied for these positions.

Hearing Impaired Blood Donation Invitation Days

As part of the protocols signed in 2023 between Turkish Red Crescent, the World Islamic Federation of the Deaf, and the Turkish Confederation of the Deaf, it was aimed to ensure the full and effective participation of individuals with disabilities in social life and to ensure that individuals with hearing impairments can volunteer to donate blood by receiving translation support through the Ministry of Family and Social Services of the Republic of Türkiye.

In this context;

It was decided to organize a "Blood Donation Invitation Day"

- In Istanbul province; At Çapa Blood Donation Center (European Side) and the Sümer Günay Blood Donation Center (Anatolian Side),
- In İzmir province; At İzmir Blood Donation Center,
- In Antalya province; At Antalya Blood Donation Center,



- In Ankara province; at Ankara (Cebeci) Blood Donation Center.

In 2024;

"Hearing Impaired Blood Donation Invitation Days"

- were first organized in 5 different Blood Donation Centers, including Ankara, İzmir, Antalya, Istanbul Anatolian Side and Istanbul European Side.
- were secondly in Ankara and Kocaeli, Bursa and İzmir Blood Donation Centers.



We Love Kindness Project

The project, for which development began in November 2023, is being carried out in Adana province and aims to provide blood transfusions to Thalassemia patients using blood donated by the same blood donors and to prevent possible complications by eliminating all variables.

Aim:

To meet the blood needs of Thalassemia and Sickle Cell Anemia patients in a sustainable manner and to raise awareness on regular and voluntary blood donation throughout the country.

Scope and Importance:

The BiS Project is being implemented in Adana province and will last 14 months for patients with Mediterranean anemia (thalassemia) and sickle cell anemia receiving treatment in Adana province.

The project covers approximately 3,750 people, including patients and blood donors. A loyal donor pool (LDP) was created for a group of 250 patients receiving treatment in Adana province. For each patient, 15 blood donors will be matched from among the donors in LDP. The aim is to perform blood transfusions for patients with thalassemia and sickle cell anemia using blood donated by the same blood donors and to prevent possible complications by eliminating all variables.

Goals:

Ana Hedef

The project is expected to produce different results in the short and long term. In the short term, it is to meet the blood needs of individuals with thalassemia and sickle cell anemia without interruption by minimizing the risk of alloimmunization.



Sub-Goals

1. To increase awareness of the public on the importance of blood diseases. Patients receiving treatment for thalassemia and sickle cell anemia must receive blood and blood components throughout their lives, and the treatment they receive is aimed at increasing the patients' lifespan and quality of life, making the availability of blood and blood components when needed even more important.
2. It is important for community to understand the importance of regular and voluntary blood donation and also to raise awareness of people on the blood donation.

To achieve these goals, this project is designed to be implemented in four stages:

1. Analysis
2. Development
3. Application
4. Evaluation

Analysis Stage

The status of thalassemia/sickle cell disease in Türkiye and the blood needs of patients receiving treatment in Adana province were analyzed by the Central Mediterranean Regional Blood Center. r.

Development Stage

Advisory boards and search groups were established using data obtained from the situation analysis of thalassemia/sickle cell disease patients in Türkiye.

- **Project Owner:** Turkish Red Crescent Blood Services Directorate General will be responsible for the execution, monitoring and reporting of the project process.

- **Project stakeholders:** Thalassemia Federation, Blood Diseases Federation, Adana City Hospital, Çukurova University Balcalı Public Hospital.
- **Advisory Committee:** The committee members were formed to include stakeholders. Advisory Committee will contribute to the development process by sharing its observations and contributions throughout the project process.
- **Call Group:** This group has two main roles.
 - Creating a Loyal Donor Pool.
 - Making and following up invitations to donate blood for a number of patients as determined in the project plan.
- Blood request lists arriving at the Central Mediterranean Regional Blood Center in Adana province, Adana City Hospital, and Çukurova Balcalı Hospital, where individuals with thalassemia/sickle cell disease are treated, are forwarded to the BIS Project Coordination Unit and consolidated by the project team.
- Following the consolidation of the lists, calls are made to the candidates included in the loyal donor pool.
- During these calls, donors are briefed about the project.
- Call conversations with the donor are recorded through the "donor callback" application.
- As part of patient-donor matching, donors are advised to visit blood service units to donate.
- A "Donor Call Procedure" is created to protect the corporate image in communications with blood donors, ensure standardization and, most importantly, maximize donor motivation.



- A loyal donor pool of regular blood donors is created.
- Gifts to be given to the donors in the Loyal Donor Pool (LDP) to increase their motivation to donate blood are identified and designed.
- Since blood donation is based on volunteering, promotion and visibility activities are of great importance for the sustainability of the project and are of great value in recruiting new volunteers. For this reason, an information area regarding the project is created on Turkish Red Crescent website, and promotions are carried out simultaneously using social media accounts (Facebook, X, etc.).

Implementation Stage

Donors who are matched with individuals with

thalassemia/sickle cell anemia whose blood transfusion days are determined are called and advised to donate blood to Turkish Red Crescent blood service units.

Evaluation Stage

The project will be evaluated and will be rolled out to other provinces where thalassemia/sickle cell anemia patients live in large numbers as an example of good practice.

The communication aspect of the project is provided through face-to-face meetings, online meetings and implementation processes. Face-to-face meetings (opening and final) are held in collaboration with the Blood Diseases Federation, Thalassemia Federation, Adana City Hospital and Çukurova University Balcalı Hospital.

Results and Deliverables:

Donor Calls Launch Date	20.05.2024
Main Data Pool with Subgroup Information Created for LDP Calls Number of Donors (Donors who have donated 2-24 units of blood)	40,783
Number of Patients Referred from RBC and with Subgroup Information	247
Total Number of Donors Called to Create LDP	2,880
Number of Donors Agreed to Become Loyal Donors	1,627
Number of Donors Not Having Become Loyal Donors	805
Number of Donors Refused	448

Communication Activities

Digital Media and Management

In accordance with Turkish Red Crescent Corporate Identity rules, works are carried out regarding the visual/design needs (building cladding, posters, brochures, etc.) of the Blood Service Units and the visual materials planned to be used in blood donation teams.

Blood Services Directorate General' official social media accounts (Instagram, Facebook, Twitter, YouTube, LinkedIn) are managed and regular donor awareness campaigns are carried out on blood and stem cell donations.

All questions, suggestions and complaints received through social media accounts are answered.

In 2024, the Blood Services website and official social media accounts achieved 1,085,819 views.

2024	View Count
X	365,176
Facebook	202,000
Instagram	384,000
Youtube	78,324
Linkedin	55,954
Total	1,085,819

The design of the official Blood Services website, www.kanver.org, is updated routinely, and content adjustments and design updates are made in this context. In 2024, our website www.kanver.org had 2,849,213 page views, 1,570,604 user interactions, 1,614,286 logins, 1,039,746 first-time visitors, and 7,073,849 total events.

www.kanver.org	
Page View Count	2,849,213
User Interaction	1,570,604
Login Count	1,614,286
First Visitor Count	1,039,746
Total Event Count	7,073,849

We are Bonded by Blood!

Aiming to increase blood inventories above a certain level and encourage regular donations in January, when winter conditions intensify, the Red Crescent launched a nationwide blood donation campaign with the slogan "We are Bonded by Blood" with a launch ceremony held on 11 January 2024. The communication kit compiled for this purpose was delivered to all Blood Service Units, ensuring maximization of the campaign visibility.

Communication Channels and Management

Communication with Blood Donors is made through SMS and mailing systems.

The SMS System allows you to send information and/or invitations to blood donors/donor candidates by selecting four different audiences: Team SMS, Candidate Donor SMS, External SMS, and Donor SMS. SMS templates are defined on the system and activated for use by blood service units. At the same time, if there is a decrease in blood donations due to reasons such as Ramadan or temperatures above or below seasonal average, the Blood Donor Recruitment Unit sends invitation SMSs to blood donors across the country. Via SMS System;

1.Team SMS and Donor SMS templates can be used when sending SMS to donors who have previously donated blood and are registered in our database.

2.External SMS and Prospective Donor SMS templates can be sent to people on bulk lists that contain the contact information shared by our stakeholders with whom we collaborate on blood donations in the field.

3.At the same time, if donors/donor candidates make an appointment through the Online Appointment System, an SMS notification is automatically sent to the donors informing them that their appointment has been made for the date and time they specified.

In 2024, 122,451,870 SMSs were sent, encouraging 820,944 people to donate blood. The rate of blood donor to the total SMSs sent is 1%. Blood donations nationwide totaled 2,779,311 units, and total blood donations via SMS totaled 820,944 units. Based on this, the rate of blood donors acquired via SMS is 30%.



122.451.870

2023 yılı gönderilen
SMS sayısı



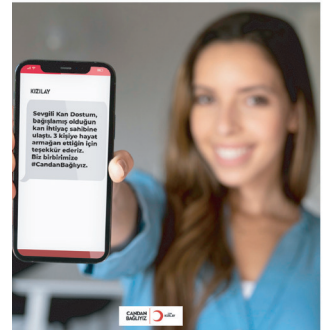
820.944

SMS giden bağışçıların
kan bağışısı sayısı



%30

Ülke geneli kan bağışısı sayısına göre
SMS olarak bağış yapmış bağışçı oranı



As part of Measuring Donor Perception and Ensuring Satisfaction;

The surveys for the measurement of “Blood Donor Satisfaction Rate” and “Blood Collection Team Satisfaction Rate”, which are among the performance indicators, started to be monitored by the Blood Donor Recruitment Unit as of October 2020 as part of ISO 10002 Customer Satisfaction Management System and ISO 9001 Quality Management System standards. Surveys are automatically sent as a link to blood donors and physicians working in the blood donation team via their e-mail addresses registered in the database, and the responses are recorded in the system, monitored, evaluated and reported.

The report regarding the surveys is monitored monthly and prepared by making question-based analyses. The relevant report is periodically communicated to all blood service units via internal e-mail. In this regard, detailed analysis can be made regarding the issue/issues affecting satisfaction. If a deviation is detected, improvement activities are initiated by the Blood Donation Center Manager as part of the relevant process.

The survey contents were updated in 2020 to understand the experience of blood donors during the blood donation process, to identify the factors that contribute to satisfaction and repeat blood donation, and to measure and analyze the awareness created among blood donors, the satisfaction of team staff regarding the blood donation teams organized by blood donation centers, and the effectiveness of the blood donation teams more effectively and efficiently.

Until 2017, the Blood Donor Satisfaction and Blood Donation Team Satisfaction Surveys, which were included in the Quality Management System, were printed out and filled out manually by blood donors and physicians working in the teams. As of 2018, the relevant surveys were digitized and sent via e-mail. In this context, it is aimed to use institutional resources effectively and to provide rapid response by reducing the response time of surveys.

In 2024, the Blood Donor Satisfaction Survey was answered by 36,291 people, with a satisfaction rate of 96.15%. Blood Donation Team Satisfaction Survey was answered by 42,929 physicians, with a satisfaction rate of 99.08%.

As part of Implementation of Corporate Visibility Standards;

The visibility of Blood Service Units is ensured as part of the Corporate Identity Guide published as a result of corporate identity guide creation process. In this context, design studies were carried out for the visual materials needed by the Blood Services Directorate General and its affiliated centers.

As part of Training, Meeting, Congress and Organization Activities;

The “Blood Donor Recruitment General Assessment and Capacity Building” meetings were held in May and December to determine annual plans for the recruitment of new blood donors within the 2024 blood donor population and to increase the number of regular blood donors and public awareness.

“Welcome Among Us” Project

One of the most important steps in blood donor recruitment efforts is to recruit motivated regular blood donors through the communication we have established, encouraging the people from all segments of society help the people in need, solidifying the unity in the community, and the desire to live together. In this context, the blood donors are the key strength and support we relied on our blood donor recruitment efforts. For this purpose, a communication campaign addressing the 18-year-olds was planned.

“Welcome Among Us” Project aims to help individuals who are old enough to donate blood acquire regular donor behavior upon their first blood donation.





MEDICAL OPERATIONS MANAGEMENT OFFICE

Activities of Medical Device Management Unit

Turkish Red Crescent places great emphasis on the safe blood principle and quality management systems, which are accepted worldwide and implemented in the field of blood banking. In order to ensure that all medical devices used in our institution meet biomedical standards, operational procedures are created in accordance with quality policies geared towards meeting international standards. To achieve these goals, the medical device management unit ensures that all medical devices are managed with high efficiency and proficiency.

The medical device management team serves at the Blood Services Directorate General with 10 people, including 6 engineers, 3 technicians and 1 engineer manager. In addition, 29 biomedical technicians and 12 qualification experts work in the Regional Blood Centers. At least one biomedical technician is employed in each region.

Depending on the initiation of biomedical activities in RBC and BDC;

- Inventory tracking and traceability is ensured.
- For the efficient and effective use of all medical devices, device transfers are carried out between

Regional Blood Centers and blood donation units.

- All processes are taken under control through staff assignments, coordination and monitoring.
- Annual maintenance and repair activities of all medical devices are monitored.
- Plans are made and processes are managed for the calibration and qualification activities of the devices.

Calibration Measurement of Medical Devices

Calibration is performed to prove that all medical devices used during the donation period and in the processing/storage of blood operate correctly and effectively in line with international standards.

Thanks to periodic maintenance and calibrations carried out in line with the defined plans, devices that are likely to fail are identified and precautions are taken. The 15,568 devices in the inventory are periodically inspected as part of maintenance, repair and calibration plans, and their calibration measurement accuracies are documented. As of the end of the year, preventive maintenance and calibration measurements were completed for 10,453 medical devices included in the Annual Maintenance and Calibration Plan.

•

Medical Device Management Unit handles the procurement, periodic maintenance, calibration measurement, inventory tracking, fault repair, and creation of device files in accordance with national and international standards for the devices needed by Regional Blood Centers, and manages the relevant processes through the SAP System.

As of the end of 2024, 15,568 medical devices are available and actively used in the Regional Blood Centers and Blood Donation Centers under the Blood Services Directorate General.

Tenders for medical device procurements were held and deliveries were made to the relevant centers through contractors.

All medical device procurements completed within the Blood Services Directorate General in 2024, in line with the needs of Regional Blood Centers, by using the device increase right of previous tenders or by holding new tenders, are listed below:

- 690 Butanediol Plated Plastic Cases (Tender and contract were made. Delivery is expected in 2025.)
- 35 Blood Shaking and Weighing Devices
- 1055 Blood Shaking and Weighing Device Spare Parts
- 55 Hose Sealing Devices
- 1100 Pieces of Hose Closing Device Spare Parts
- 8 Blood Storage Cabinets

Plasma Fractionation Project Equipment Qualification Activities

Since 2019, qualification processes have been implemented in selected Regional Blood Centers under the Plasma Fractionation Project. Protocols and agreements for this strategically important project for Türkiye have been signed, and the project has been made ready for production after five regions successfully passed the audit of European Medicines Agency. In addition, the West Anatolian RBC was included in the project as of 2024 and its qualification validation process has been completed, making them ready for audit in 2024. In addition to these regions, the Aegean RBC and the South Aegean RBC are planned to be included in the fractionation project with the process launch scheduled in 2025.

The qualification team formed by the Medical Device Management Unit for validation and qualification processes is currently working organized and actively in fractionation areas. At West Anatolian RBC, qualification process for 520 of the 678 devices were completed ready for Fractionator and EMA audit.

Routine requalifications of all devices in the already-qualified North Marmara RBC, Central Mediterranean RBC, Central Black Sea RBC, Central Anatolia (Ankara) RBC, European (Istanbul) and Central Anatolia RBC (Kayseri) were also completed throughout the year to maintain their qualifications validly effective.



Activities of Operational Planning Unit

Operational Planning Unit centrally plans the main items of medical consumables needed by Blood Service Units, initiates central procurement processes, determines monthly consumption rates and needs according to targets, makes monthly requests, and provides the necessary coordination and planning services for the restructuring of Blood Service Units, such as opening, closing, renovations, etc.

Medical Consumables Planning

At Blood Service Units, the medical consumables needed for blood donation receipt, blood fractionation, and screening tests are planned. Planning of centrally procured medical consumables is done monthly and is prepared in line with optimal needs in line with inventory information, targets, safety inventories and consumption rates.



Medical Consumables Requested in 2024 Table		
No	Product Name	Quantity
1	T&T Blood Bag System with Inline Filter	401.452
2	T&B Blood Bag System with Inline Filter	2.245.392
3	Pooling Bag System	328.940
4	Quadruple Cell Washing Blood Bag System	1.600
5	Transfer Bag System for Pediatric Red Blood Cell Concentrate	3.775
6	Single Transfer System	40.000
7	Platelet Apheresis Set	57.684
8	Hbsag II Test Kit	2.936
9	Anti-HCV II Test Kit	2.922
10	HIV Duo Test Kit	2.976
11	Syphilis Test Kit	2.932.800
12	Ferritin Test Kit	213.600
13	Hbsag Confirmation Test Kit	1.200
14	Anti-Hbc II Test Kit	7.500
15	Anti-Hbs II Test Kit	3.900
16	Vacuum Gel Tube 8-10 ML	2.759.000
17	Anti HIV 1/2 Confirmation Test Kit	2.300
18	Anti-HCV Confirmation Test Kit	4.140.000
19	Forward Abo/Rh D Grouping Test Kiti	3.003.560
20	Abo/Rh Forward & Reverse Grouping Test Kit	908.900
21	Rh Subgroup Test Kit	29.900
22	Anti-A1 Test Kit	22.200
23	Anti-H Test Kiti	22.200
24	Weak D Test Kit	416.400
25	Antibody Screening Test Kit	942.600
26	Direct Anti-Globulin (Dat) Test Kit	22.200
27	Indirect Anti-Globulin (lat) Test Kit	10.400
28	Nat Test Kiti	2.864.650
29	Nat Test Tube	5.690.400
30	Nat Confirmation Test Kit (HBV DNA)	2.112
31	Nat Confirmation Test Kit (HCV RNA)	768.000
32	Nat Confirmation Test Kit (HIV RNA)	1.536
33	Factor VIII Determination Kit	2.499
34	Fibrinogen Determination Kit	540.000
35	Von Willebrand Factor Determination Kit	180.000
36	Residual Leukocyte Count Kit (Blood Bank Mode)	13.900
37	Blood Count Solution (Blood Count Mode)	12.300
38	Aerop Automated Bacterial Culture and Identification System	16.355
39	Anaerobic Automated Bacterial Culture and Identification System	16.355
40	Hemoglobin Determination Strip (Microcuvette)	3.730.000
41	5 L Medical Waste Bin	97.380
42	7 L Medical Waste Bin	122.140
43	Vacuum EDTA Tube (4 ml)	120.000
44	Blood Collection Needle Tip	3.059.400
45	Blood Count Solution	120.000
46	Sterile Connector Kit	1.768.200
47	Automatic Lancet	3.374.000
48	Blood Irradiation Label	262.100
49	Antiseptic Skin Cleansing Wipes	2.034.000
50	Wristband Barcode Label	2.540.000
51	Cocoa Cream Biscuit (Cokoprens)	4.580.880

Procurement Requisitions

Annual requirements plans are created in line with the consumption rates of centrally procured medical supplies and the remaining quantities to be procured from the company, and procurement requisitions are

made if need arises. In this context, a procurement requisition was made for the procurement of 5 items of medical consumables in 2024 out of 52 items used. Contract terms were extended by making additional procurements for 9 items of material.

Central Procurement Requisitions for 2024			
No	Medical Equipment Name	Material Amount	Unit
1	Apheresis Platelet Set	200.000	Quantity
2	Antiseptic Skin Cleansing Wipes	11.000.000	Quantity
3	Wristband Barcode Label	11.000.000	Quantity
4	Single Transfer Bag System	200.000	Quantity
5	Leukocyte Filter for Platelet Suspension (In-line Leukocyte Filter Buffy Coat Pooling Bag System)	750.000	Quantity

Additional Procurement Requisitions Made Centrally in 2024			
No	Medical Equipment Name	Material Amount	Increase Amount
1	Ferritin Test Kit	630.000	Additional Procurement
2	Blood Irradiation Label	270.000	30%
3	Serology Infectious Screening Test Kit	3.000.000	20%
4	Nat Test Kiti	3.000.000	
5	Nat Confirmation Test Kit (HBV DNA)	5.400	30%
6	Nat Confirmation Test Kit (HCV RNA)	3.900	
7	Nat Confirmation Test Kit (HIV RNA)	1.200	
8	Bacterial contamination and identification system (Aerop Culture Bottle)	13.500	30%
9	Bacterial contamination and identification system (Anaerobic Culture	13.500	



Test Kit Losses/Material-Related Medical Supply Tracking

Centrally procured medical supplies are monitored as part of contracts. In this context, disposed blood components and kit losses delivered from Regional Blood Centers are evaluated and sent to the relevant unit for procurement, or charged to companies.

Immuno-hematological Test Kit Losses								
Forward and Reverse Abo/Rh D Grouping Test Kit	Forward Abo/Rh D Gruplama Test Kiti	Rh Subgroup Test Kit	Anti-A1 Test Kit	Anti- H Kiti	Weak D Test Kit	Antibody Screening Test Kit	Direct Anti- Globulin (DAT) Test Kit	Indirect Anti- Globulin (IAT) Test Kit
22.396	30.322	9.315	348	238	245.210	33.437	147	807

Blood Count Device Kit Losses Table		
1	Central Anatolia RBC (Ankara)	6
2	Europe BC (Istanbul)	3
3	Aegean RBC (İzmir)	6
4	South Aegean RBC (Denizli)	9
5	Central Black Sea RBC (Samsun)	6
TOTAL		30

Blood Bag System Disposal Table				
Quadruple Top&Top Blood Bag System with Whole Blood In-Line Leukocyte Filter and Sag-M	Quadruple Top & Bottom Blood Bag System with In-Line Leukocyte Filter and Sag-M	Leukocyte Filter for Platelet Suspension (In-Line Leukocyte Filter Buffy Coat Pooling Bag System	Quadruple Cell Washing Blood Bag System	Pediatric Bag System
66	190	0	2	0

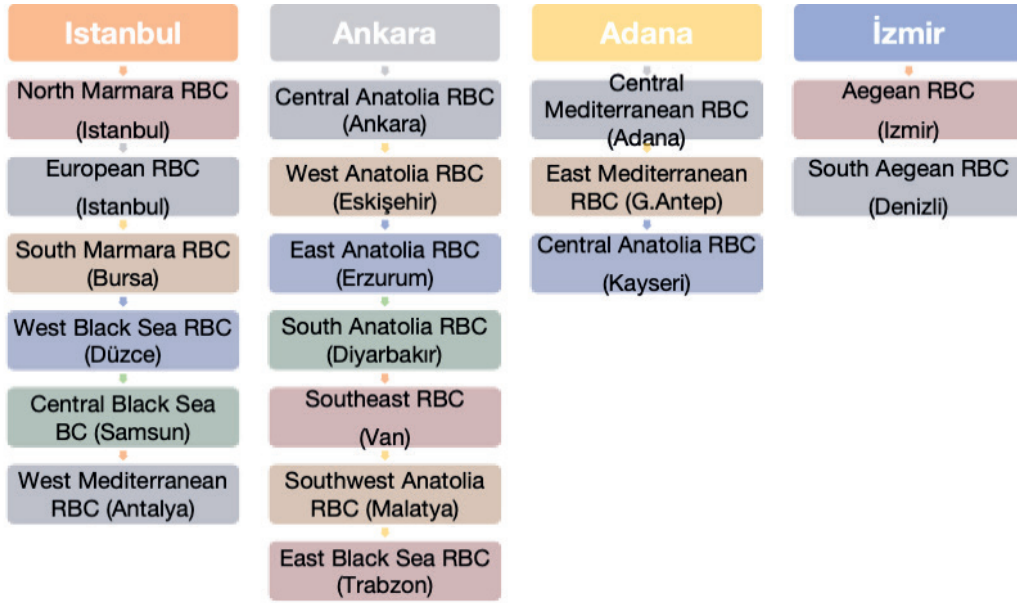
Production-Related Blood Component Disposal Table			
Erythrocyte Suspension	Pooled Platelet Suspension	Washed Erythrocyte Suspension	Pediatric Erythrocyte Suspension
306	18	4	1

Blood Component Disposal due to Sterile Connector Table		
Regional Blood Centers		Number of Blood Components Disposed
1	Inland Anatolia RBC (Kayseri)	3
2	East Mediterranean RBC (Gaziantep)	5
3	Central Mediterranean RBC (Adana)	10
4	South Aegean RBC (Denizli)	1
5	Central Black Sea BC (Samsun)	1
TOTAL		20

Logistics Tracking of Test Tube Samples

As the laboratories are centralized, the laboratories where the test tubes of the bloods collected by Regional Blood Centers will be processed are planned and identified by Directorate General Blood Services by taking into account the target, geographical conditions, and available logistical means of the Regional Blood Centers.

Provinces with 4 Central Laboratories in 2024 and the RBCs with Tests completed



Production Integration Processes

As part of the production integration processes of blood products, monthly system definitions are made, and completion and closing processes are carried out through the system for cost conversion of the products.

Monthly system definitions are made in the first week of the month to enable production integration processes for blood products to be derived from donated blood through the SAP system.

Planlı sipariş oluşturma programı (excel upload)

Durum	Sprş.türü	ÜY	Malzeme	Malzeme kısa metni	Miktar
	LA	3001	30000257	TAM KAN (TK)	20
	LA	3001	30000257	TAM KAN (TK)	20
	LA	3002	30000257	TAM KAN (TK)	20
	LA	3002	30000257	TAM KAN (TK)	20
	LA	3003	30000257	TAM KAN (TK)	20
	LA	3003	30000257	TAM KAN (TK)	20
	LA	3004	30000257	TAM KAN (TK)	20
	LA	3004	30000257	TAM KAN (TK)	20
	LA	3005	30000257	TAM KAN (TK)	20
	LA	3005	30000257	TAM KAN (TK)	20
	LA	3006	30000257	TAM KAN (TK)	20

For cost conversion of the productions, the completion and closing processes of the previous month are carried out through the system at the end of each month.

Toplu işleme - Sipariş başlıkları

Sipariş	Malzeme	İkon	Sprş.türü	MIP sor.	Ürtn.sıml.	Üretim yr.	Hdf.miktar
30815176	30000904		ZP22			3001	20
30803987	20000111		ZP21	302	100		20
30792258	20000130		ZP21	302			84
30798153			ZP21	302			120
30798255			ZP21	302			84
30799227			ZP21	302			150
30799406			ZP21	302			1
30799421			ZP21	302			60
30799972			ZP21	302			24
30800068			ZP21	302			72
30800075			ZP21	302			72

Planning of Blood Service Units

For opening and closing of the blood service units, the unit carries out, monitors and coordinates the project-design, budgeting of the rehabilitation works, allocation/renting/purchasing, as well as construction/renovation works in line with the processes defined according to good construction practices.

- As part of the performance indicator 1.5.1.5. "Number of improved & new service units" in the strategic plan, Yozgat Blood Donation Center is planned to move to its new building in 2024. However, the construction process could not be resumed because of a dispute between contractor and our institution followed by a lawsuit which require submission of mechanical, construction and electrical expert reports among which only construction and electrical expert reports were submitted in August with the mechanical report remaining to be submitted.
- Requests from Regional Blood Center Managers to open 8 Blood Collection Units and to close 4 Blood Collection Units were evaluated and the processes were initiated.

Blood Service Units Planning in 2024

Blood Service Unit Opened	Blood Service Unit Closed
Provincial Health Directorate Blood Collection Unit (Malatya)	Izmit Blood Collection Unit
July 15 Democracy Square Blood Donation Unit (Bursa)	Hunat Blood Collection Unit (Kayseri)
Yogunburç Blood Collection Unit (Kayseri)	Uşak Blood Collection Unit
Anafartalar Blood Collection Unit (Ankara)	Zonguldak Blood Collection Unit
Bahçelievler Blood Collection Unit (İstanbul)	
Şirinyer Blood Collection Unit (İzmir)	
Elâzığ PTT Meydanı Blood Collection Unit	
Manavgat Blood Collection Unit (Antalya)	

- To support the fire and flood disaster response efforts that occurred in our country in 2021, Kuwait Finance House has been providing a fund support of USD 5,000,000.00 to our Institution through the Kuwait Red Crescent Society. In this context, the installation of the last 3 Modular Blood Collection Units out of 7 Modular Blood Donation Points designed and constructed by Kızılay Sistem Yapı A.Ş. were completed in the provinces of Kayseri, Antalya and İzmir.



Modular Blood Collection Unit established in Kayseri province



Modular Blood Collection Unit established in Antalya province



Modular Blood Collection Unit established in İzmir province



- The “Turkish Red Crescent Manavgat Blood Donation Unit” was opened in the Manavgat district of Antalya province with a conditional cash donation from the Manavgat Chamber of Commerce and Industry.

- Following the earthquakes centered in Kahramanmaraş on February 6, 2023, the İskenderun Blood Donation Center reconstruction and reinforcement project was agreed as part of the Memorandum of Understanding between Turkish Red Crescent and the Korean Red Cross to meet the needs of the people affected by the earthquake and to strengthen the capacity of Turkish Red Crescent. Main activities to be carried out as part of the project;
- Construction of 2 Platform type Blood Donation Vehicles including Medical Devices,
- Construction of 2 Modular Blood Donation Points including Medical Devices,
- The construction and commissioning of a building for the İskenderun Blood Donation Center, including its medical devices.

The total projected budget for the project is \$3.051.790,00

As part of the project, technical specifications were prepared for 2 Modular Blood Collection Units and 2 Platform type Blood Donation Vehicles. The tender process for 2 Modular Blood Collection Units was completed. The tender process for the procurement of 2 trucks is in progress.

- Following the earthquakes centered in Kahramanmaraş on February 6, 2023, the Adıyaman Blood Donation Center reconstruction and reinforcement project was agreed as part of the Memorandum of Understanding between Turkish Red Crescent and the Japanese Red Cross to meet the needs of the people affected by the earthquake and to strengthen the capacity of Turkish Red Crescent. Main activities to be carried out as part of the project;
- Construction of 1 Platform type Blood Donation Vehicles including Medical Devices,
- Construction of 2 Modular Blood Donation Points including Medical Devices,
- The construction and commissioning of a building for the Adıyaman Blood Donation Center, including its medical devices.

The total projected budget for the project is \$2,174,450.00.

As part of the project, technical specifications were prepared for 1 Modular Blood Collection Unit and 2 Platform type Blood Donation Vehicles. The tender process for 1 Modular Blood Collection Units was completed. The tender process for the procurement of 2 trucks is in progress.

- Kars Blood Donation Center has moved to its new rented building.



- Erzurum Blood Collection Unit has been renovated from scratch and is now back in service



- The layout plan and architectural floor plans prepared for Kahramanmaraş Blood Donation Center building were complied with. A tender was held by Property Management Directorate General for the project design of the building.
- For Amasya Blood Donation Center building construction, the punch list items at the final acceptance was completed.
- Malatya Blood Donation Center has moved to its new rental building.



Activities of Blood Collection, Production and Inventory Management Unit

Blood Collection, Production and Inventory Management Unit carries out its activities under Medical Operations Management Office within Blood Services Directorate General.

The main roles of the unit, for the purposes of meeting the country's blood needs are:

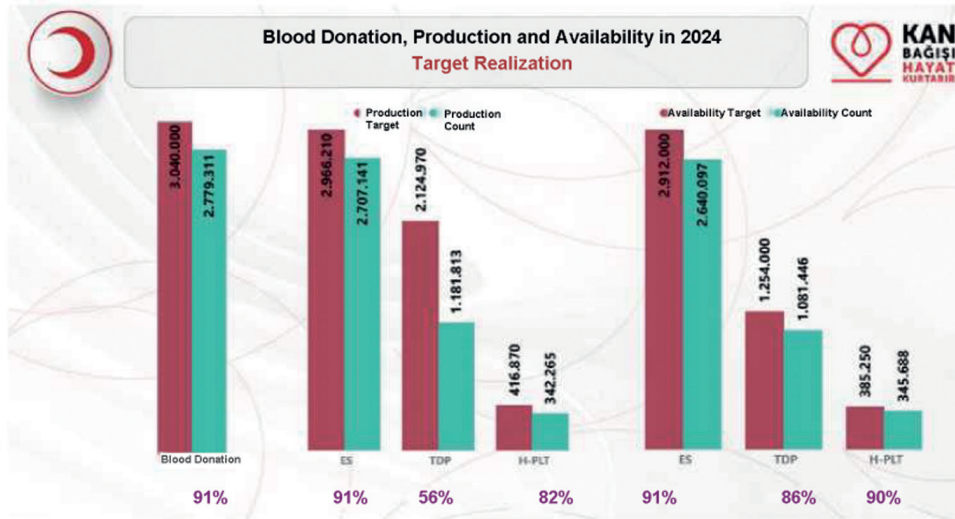
- To identify, monitor and revise, when necessary, the blood donation targets of the Regional Blood Center and Blood Donation Centers,
- To support the capacity building needed by BDCs in line with the targets (bonuses, staff, vehicles, tents, blood donation trucks, etc.),
- To plan the production and service delivery of collected blood,
- To improve the quality of service by monitoring the blood component inventory across the country and to provide necessary distribution network,
- To ensure supply/demand balance through interregional blood component transfers,
- To plan the distribution and inter-regional transfer of blood components in ordinary and extraordinary situations by minimizing disposal through inventory tracking,
- To analyse and report Blood Services activities,

The total annual blood donation target of 18 Regional Blood Centers and 69 Blood Donation Centers in 2024 is identified as 3,040,000 units. The total annual blood donation target is distributed monthly to RBCs and BDCs, taking into account their regional structures and capacities.

Based on blood donation targets, monthly and annual blood component production targets were planned on a RBC basis for 2024.

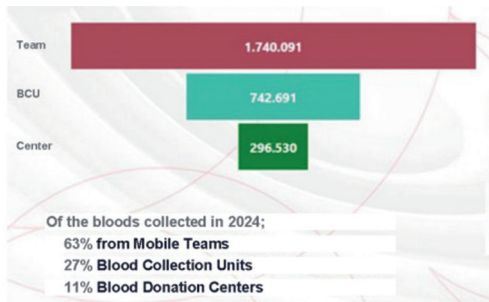
In this context, in 2024;

- 2,779,311 units of blood were collected, meeting the target of 3,040,000 units by 91%.
- 2,707,141 units of ES were produced, meeting the target of 2,966,210 units by 91%.
- 1,181,813 units of FFP were produced, meeting the target of 2,124,970 units by 56%.
- 342,265 units of PPS were produced, meeting the target of 416,870 units by 82%.
- 2,640,097 units of ES were made available, meeting the target of 2,912,000 by 91%.
- 1,081,446 units of FFP were made available, meeting the target of 1,254,000 by 86%.
- 345,688 units of PPS were made available, meeting the target of 385,250 by 90%.



“Blood Donation Target Management Procedure” was revised and put into effect in 2023 to ensure blood donation target/realization and to improve team efficiency.

In 2024, 41,263 blood donation teams were deployed nationwide, who collected 1,740,091 units of blood.



Blood Collected	NUMBER OF TEAMS DEPLOYED	NUMBER OF BLOOD DONATION
Mobile Team	41,263	1,740,091
BCU	21,374	742,691
Blood Center		296,530

The staff and vehicle requirements needed to achieve blood donation targets at national and regional levels were determined, with the necessary requisitions for

staff made in 2024. In this context, a total of 320 staff requisitions were made in 2024.

Staff	Number of Requisitions in 2024
Doctor	187
Phlebotomist	101
Laboratory Technician	32
Total	320

In order for the RBCs to progress in line with their targets, staff assignments were made periodically among the regions where staff needs arose. In 2024, among the RBCs;

- Doctor for 232 days
- Phlebotomist for 446 days
- Laboratory technician for 71 days

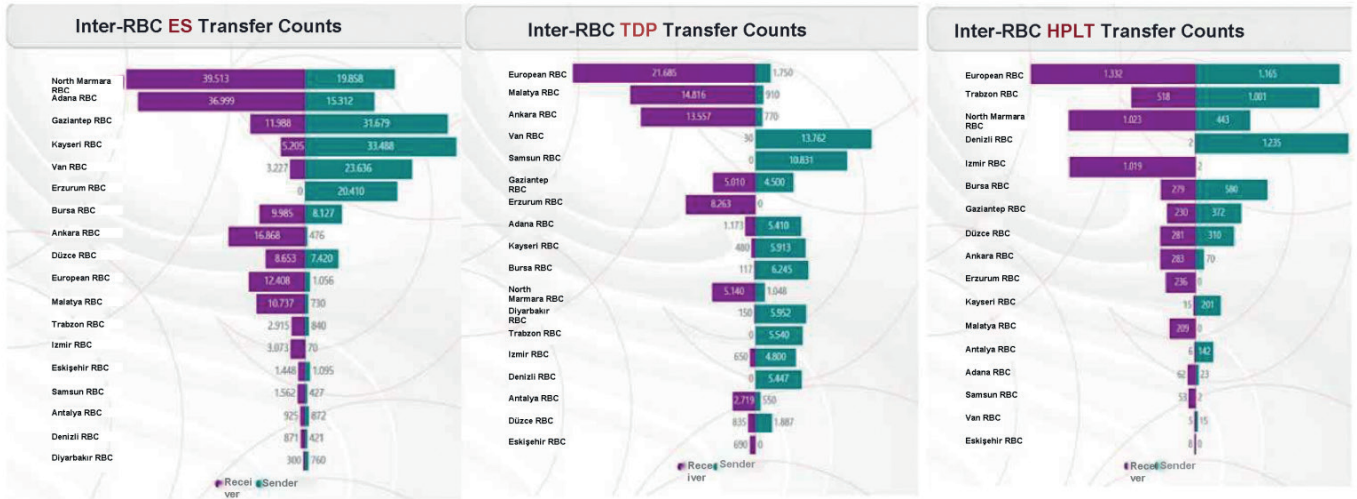
were assigned on a temporary basis.

Necessary measures were taken to determine, monitor

and maintain minimum blood inventory levels on a regional basis, and a balanced distribution of blood inventories among RBCs was ensured at the national level.

With effective inventory management in 2024, disposal due to expiration will be avoided and between the regions;

- 166,677 units of Erythrocyte Suspension,
- 75,315 units of Fresh Frozen Plasma,
- 5,561 units of Pooled Platelets were transferred.

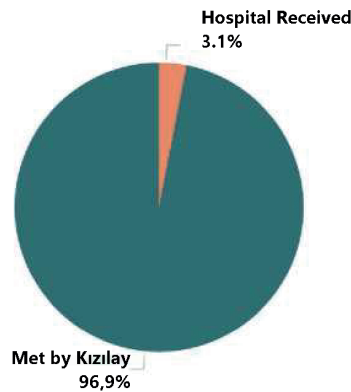


An action plan was created to meet the need for blood in emergency situations, and coordination was established with the relevant departments of Turkish Red Crescent to keep the entire chain active.

Hospital transfusion centers request the blood and blood components they need through the Blood Component Identification and Traceability System, and Turkish Red Crescent Regional Blood Centers deliver blood and blood components to hospitals with their own vehicles. In this way, the suffering of patients and

their relatives was eliminated, product quality was prevented from decreasing, preventing disposal of them.

In 2024, the blood need of 1,142 hospitals under the responsibility of Turkish Red Crescent and with Transfusion Center status was 2,756,791 units. Turkish Red Crescent met 96.9% of the blood needs of hospitals with Transfusion Center status. Of the 84,584 units that constitute the 3.1% that cannot be met, 43% consists of Apheresis Platelets, with 57% of Erythrocyte Suspension.



Turkish Red Crescent	2,672,207
Transfusion Centers	84,584
Blood Component Need	2,756,791

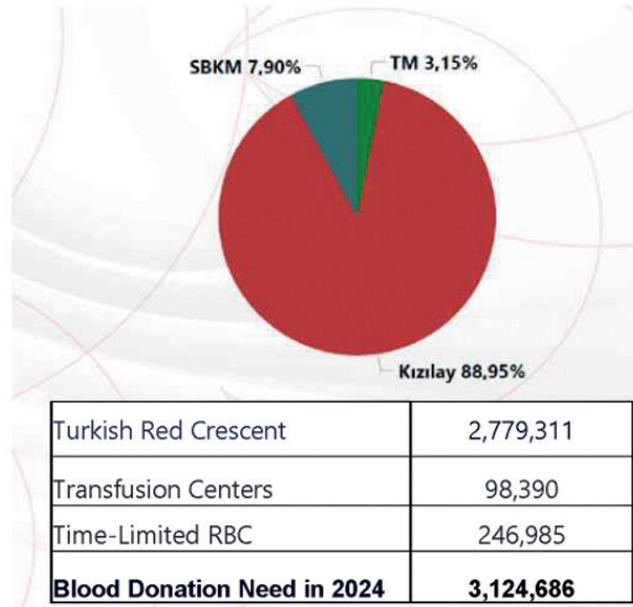
With the status of Transfusion Center under the responsibility of Turkish Red Crescent, 98% of the Erythrocyte Suspension needs of the hospitals, 100% of the Fresh Frozen Plasma needs, 100% of the Pooled Platelet Suspension needs and 64% of the Apheresis Platelet needs were met.

In 2024, 14 hospitals were designated as Temporary Regional Blood Center by the Ministry of Health. These

hospitals meet their blood and blood component needs via their own centers.

In 2024, 64,419 units of blood, which constitutes 21% of the blood needs of these hospitals, which used 311,404 units of blood, were met by Turkish Red Crescent.

In 2024, the country's blood need was 3,124,686 units, while 88.9% of the blood donations nationwide were collected by Turkish Red Crescent.



In order to improve the effectiveness of the blood collection activities of the Blood Collection, Production and Inventory Management Unit, the department also carries out the provision of blood donation tents for use by the teams and the execution and monitoring of blood donation truck rental activities. Service procurement was carried out to deploy blood collection trucks in the field, which were acquired through renting. In 2024, 247,853 units of blood were collected as a result of 5,172-day team work on the Blood Collection Trucks. 14% of the 1,740,091 units of blood donations collected teams in 2024 were done by Truck teams.

Statistical analyses of blood services activities are carried out by the Blood Collection, Production and Inventory Management Unit, where daily and monthly Blood Statistics Reports are prepared and shared with the entire organization. The unit prepares and manages business intelligence applications for the Blood Services Directorate General. In addition, all reports and analyses requested by managers during the decision-making stage, as well as manager information notes, are prepared and submitted to the relevant authorities.



DEPARTMENT OF FINANCIAL AND SUPPORT SERVICES





FINANCIAL AFFAIRS OFFICE

Activities of Budget Planning and Reporting Unit and Accounting Management Unit

- As part of the digitalization project implemented in our institution, the SAP program continues to be used effectively.
- As part of the e-ledger system, legally required ledgers were sent to the Revenue Administration in electronic form.
- The transfer of bank balances is continuously monitored throughout the day and unused balances are transferred to the Head Office account, thus ensuring that unused balances are used effectively by our Head Office. Bank transactions are regularly processed into the SAP system by the affiliates during the following day.
- Regular checks are carried out to ensure that our Regional Blood Centers are informed about the financial functioning of our institution and that their records are processed correctly in the SAP system.
- Months in which transactions were made in the SAP system were regularly closed, costing studies were carried out and the resulting income statements were shared with senior management.
- Cash Flow Statement of Financial Affairs Office, report showing our receivables from hospitals and those under legal follow-up, reports showing the amount and number of monthly invoices issued to hospitals and the collections made from them, budget realization reports were prepared and shared regularly with senior managers.
- Regular payments were made to suppliers, taking into account the organization's cash flow.
- Our institution's wage, tax and SSI payments were consolidated and checked, reported to the Department of Finance and Treasury Management, with payments made.
- Routine accounting and budgeting procedures were carried out daily and in a planned manner.
- The budget items used by our Regional Blood Centers in 2024 were analyzed, and a 2025 budget proposal was prepared according to our 2025 targets and projections, and was approved by our Board of Directors.
- As part of the 2024 budget, budget realizations were analyzed in the budget items used by our Regional Blood Centers; comparative budget realization

analyses of Regional Blood Centers were conducted by taking into consideration the factors such as the Turkish average, the number of staff in the region, the number of affiliated hospitals, the number of hospitals they serve, etc. These data were shared with the relevant Regional Blood Centers and reported to our senior managers.

- As a result of our work and discussions, we have accelerated our collections of overdue receivables

recorded in the accounting accounts of state-affiliated university hospitals and public hospitals to which we provide blood and blood product supply services.

- Relevant public institutions have been continuously informed through official letters and reports regarding the price increases for blood and blood products in the Health Implementation Communiqué, and the results have been achieved.





SUPPORT SERVICES OFFICE

As the Support Services Office, we carry out all staff affairs of permanent and service procurement staff assigned to the Blood Services Directorate General and its affiliated Regional Blood Center Offices as part of the quality management system. Furthermore, in order to ensure the uninterrupted performance of all activities, the duties and responsibilities of these staff are defined in accordance with the blood guide and we contribute to the processes for the employment of a sufficient number of staff to work in this context. On the other hand, our Office carries out all purchasing, supply and logistics processes within the Blood Services Directorate General, the relevant documents are recorded through the SAP software system in accordance with the principles of transparency and accountability, and processes are carried out to ensure that the records in question are audited by internal and external audit units.

Activities of Procurement and Administrative Services Unit

- To identify the evaluation criteria and methods in accordance with institutional rules for requisitions in the field of blood activity,
- To manage tender, negotiation and decision stages for procurements,

- To oversee the contract management,
- To steer management of supplier improvement, review and feedback processes within the quality system,
- To oversee inventory management of medical supplies and consumables,
- To carry out general maintenance and repair works of the buildings,
- To steer management of the rental and association vehicle fleet used in blood services activities,
- To carry out rental and maintenance and repair operations of properties used in blood services activities,
- To coordinate the support staff services hired through outsourcing,
- To carry out operational processes for administrative and support services.

At the same time, as part of the digital transformation process carried out in our Institution, among the projects and studies carried out directly by the Blood Services Directorate General and in collaboration with other units;

- To carry out raw material-component integration processes between the Blood Banking Information Management System and the Enterprise Resource Planning Software material management,
- To manage the rental processes of blood centers used for rent within the Enterprise Resource Planning Software through the Cash Flow Project,
- To identify the Quality Management System requirements in the operational processes of blood services purchasing, logistics and administrative services, to create the relevant quality procedures and carry out improvements,
- To carry out the qualified procurements required for the Plasma Fractionation Project carried out with the Ministry of Health to derive medicines from plasma products,
- To prepare and update the documents that need to be included in the Quality Management System on Supplier Management, inventory Management and Administrative issues, to carry out improvements, to provide the necessary support to the commissions,
- Enterprise resource planning software provides support for the integration of the materials management module with other modules, the provision of key user support to end users, user training, and the preparation of training documents.

Activities of Payroll and Staff Affairs Unit

All documents related to human resources, such as staff request forms, staff petitions, payroll and staff requests of Regional Blood Centers, staff offboarding, awards and disciplinary actions, etc. for the staffing needs of the Blood Services Directorate General, Regional Blood Centers and their affiliates, have been finalized in accordance with laws, regulations and procedures through both Turkish Red Crescent Directorate General and the Blood Services Directorate General.

Staff Planning

By evaluating both the medical and financial processes of all Blood Service Units, administrative and healthcare staff recruitment was carried out in 2024. The recruitment procedures, SAP transactions (staff definition, registry information, payroll data, etc.) of the staff recruited to the Blood Services Directorate General, Regional Blood Centers and their affiliates were carried out in line with their roles, authorities and responsibilities, with orientation training planned and followed up by the relevant units, ensuring a seamless onboarding process in the blood service units.

Appointment, Transfer, Temporary Assignment, Offboarding and Deputation Processes

It has been ensured that the appointment, transfer, promotion, temporary assignment requests,

offboarding and other human resources processes of the staff of Blood Services Directorate General, Regional Blood Centers and Blood Donation Centers are carried out in accordance with the legislation and procedures.

The requests of the staff of Blood Services Directorate General for transfer as part of the 1st (May 15-June 15) and 2nd (September 15-October 15) transfer periods in 2024 were evaluated and finalized within in accordance with transfer criteria.

Support was provided to the units in need by temporarily assigning staff of Blood Services Directorate General, the Regional Blood Center and its affiliates, either voluntarily, without per diem or accommodation, due to family, educational, etc. reasons, or with per diem due to the staff needs of the blood service units.

Deputation processes have been carried out for staff who will fill vacant positions or for employees in managerial positions who cannot be on duty due to assignment, travel, leave, sickness, etc.

Social Security and Payroll Processes

Salary accrual transactions of the staff of Blood Services Directorate General were carried out and accordingly, Social Security notification, BES, SAP FI (transfer of salary accruals to accounting records) transactions were carried out.

Blood Services Directorate General, Regional Blood Center and its affiliates' salary patterns were coordinated with Republic of Türkiye Ziraat Bank, with payments made to staff's salary accounts. In addition, the implementation and reporting of discount amounts communicated by the relevant company as part of SSI incentives were carried out.



SAP and Key User Processes

As part of the corporate transformation project, the SAP system was switched as of 01.01.2019 and the SAP HR module started to be used by Payroll and Staff Affairs Unit. As SAP Key User Blood Services Human Resources, we have carried out transactions such as salary accruals, staff information, etc. through the SAP system, and we have followed up and resolved requests made to destek@kizilay.org.tr regarding new requests, problems, and similar issues as part of SAP and SAP Fiori system by the staff of Blood Services Directorate General and its affiliates. In addition, an active role was taken in the control and service delivery activities as a result of the identification of new needs related to the system, laws, regulations, etc. into the SAP system. In-house training processes were carried out for our staff working within the Blood Services Directorate General, by providing solutions as key users regarding new requests, problems and similar issues as part of the SAP software program.

Reward and Disciplinary Processes

Disciplinary processes of Blood Services Directorate General, Regional Blood Center and its affiliates, which were the subject of the Central Disciplinary Board of the Blood Services Directorate General, were examined, investigated, and the necessary procedures were implemented and concluded.

Processes Regarding Staff Benefits

As part of the institution's staff benefits practice, all processes were carried out from the collection, ordering

and distribution of requests for educational assistance given to staff and gift certificates given to newly married and newly born staff until the payment stage.

Again, as part of staff benefits, all processes related to complementary health insurance of staff and their spouses/children, from policy issuance to payment stage, were carried out.

Service Procurement Processes

Operational processes were carried out for blue-collar workers such as cleaners, drivers, promoters and data entry processors through service hiring at Regional Blood Centers and affiliated units of the Blood Services Directorate General.

Other Processes Related to Human Resources

Processes such as employee leave, absence, PDKS, working system, overtime, etc. have been carried out in accordance with internal and legal regulations.

In line with Quality Management System, a solution was found for SCC (satisfaction, comment, complaint) reports and the closure of SCC report events was ensured.

Necessary processes and procedures have been implemented to update documents and forms related to human resources that need to be changed for various reasons, and the relevant process has been provided for the use of all Blood Service Units.



**DEPARTMENT OF
QUALITY AND
STRATEGIC
MANAGEMENT**





QUALITY MANAGEMENT OFFICE

As part of reorganization efforts, the unit working under the name of Quality Coordination since 2005 was renamed as Department of Quality and Strategic Management. It is aimed to improve the effectiveness of the activities by separating the integrated quality management activities and the business continuity and strategic management activities carried out for the sustainability of the system and by creating specializations under the roof of two separate units.

- The activities and processes carried out by the Quality Management Office include central and regional activities, including accreditation and certification to ensure quality; centrally conducted internal audits to determine on-site conformity; cross-audit and self-assessment activities carried out by regional offices; central and regional activities to ensure the appropriateness of deviations, revisions and improvement activities affecting annual product analyses, and the up-to-dateness of standard operating procedures.
- The activities and processes carried out, coordinated, monitored and evaluated by the Quality Management Office include:
- To participate in international quality management system programs that are required by the regulations,
- To integrate Turkish Red Crescent Excellence Model practices with the practices of our Directorate General,
- To assess compliance with applicable national regulations and the European Union acquis,
- To carry out quality assurance activities as part of Good Manufacturing Practices,
- To carry out the quality processes of business continuity applications,
- To carry out the quality processes of Blood Quality Risk Management,
- To verify the compliance of validation activities with standards,
- To monitor the correct classification of deviations/ non-conformities or detected findings in areas

open to improvement and ensuring that effective improvements are made,

- To manage changes by controlling them, managing deviations from the change requirements, performing analyses of validation and qualification studies through cross-checks,
- To maintain the qualifications of our experts in the quality management, especially quality assurance and quality monitoring experts,
- To include all staff in in-house training programs to ensure their awareness on Good Manufacturing Practices activities,
- To create and/or update the Blood Service Unit License Master File and Plasma Facility Master Files,
- To monitor the up-to-dateness of the responsible physician documents and responsible manager documents, which form the basis of the license, and ensuring coordination with the relevant institutions of the Ministry,
- With respect to the regional quality assurance processes, to identify the findings in accordance with references, to detect nonconformities, complaints, accidents, deviations, near misses, etc. and to improve all recorded areas open to improvement with a holistic approach.
- Our blood service units carry out quality assurance processes as part of Good Manufacturing Practices (GMP) for production of plasma production, being the starting material that can be converted into a product, with the standards for which we are accredited and/or certified. Our services are strictly regulated by the applicable internationally published guides and manuals, along with national legislation, particularly the Blood and Blood Products Law No. 5624, the Blood and Blood Products Regulation, the Quality Management System Guide for Blood Service Units, the National Standards Guide for Blood Service Units, the National Hemovigilance Guide, the National Blood and Blood Components Preparation, Use and Quality Assurance Guide, as well as the European Union and the Council of Europe directives on blood banking and pharmaceutical production.
- The increasing requirements that our institution must follow, coupled with the increasing works for control and integration of these requirements to the system, has led to increased work for our Quality Assurance Specialists. To ensure sustainability, the number of Quality Assurance Specialists (Auditors) required to work in a region has been determined by taking into consideration many criteria such as the breadth of the domains of blood service units, the services they provide, the units in their structure, as well as needs, capacities (workforce, infrastructure, etc.), the degree of

complexity of the fields, the number of production, blood donation points and the number of blood donations received, etc. In this way, it is aimed to ensure that our processes are controlled effectively and periodically, and that the increased works are carried out in a timely and efficient manner by distributing them in accordance with the number of staff.

Activities of Quality Assurance Unit

Blood Quality Management System Software was created in 2015 by modeling a paperless quality management for the management and control of all documents and records, corrective and preventive activities, review processes and all recorded feedback managed as part of integrated quality management systems. In accordance with the legislation, validation studies were completed within the framework of GAMP at the end of 2019.

We have been involved in the update studies carried out as part of the Blood and Blood Products Regulation. The necessary update preparations were included in accordance with the operation and requirement definitions for the areas of activity of Turkish Red Crescent Blood Services Directorate General.

Needs assessment, improvement and development studies of the Blood Quality Management System (BQMS) Software, control of errors during process operation, integration with other software, and review and revalidation needs assessment studies in line with GMP requirements are carried out. In order to ensure the effective use of the software, the BQMS Guide and User Guide are also kept up to date.

Highly efficient blood donation organizations are being organized with the support of local governments across the country. Highly targeted blood donation organizations organized within a defined scope are monitored and evaluated starting from team planning to the point where the blood donations received and the blood components produced are made available, through all the software and records used. The data collected following the evaluation/analysis contributes to the development of the process and the maintenance of permanent improvements regarding the detected nonconformities. In this context, blood donation organizations were analyzed and areas for improvement were identified and reported to senior management and relevant blood service units.

Evaluation Reports Created, and Topics

Quality Assurance Unit is responsible for the design of quality management processes and periodic review of the system in accordance with both institutional policies and system requirements.

- As part of the TÜRKÖK Application Guide evaluation process, a gap analysis was conducted in line with National Blood and Blood Component Preparation,

Use and Quality Assurance Guide and the World Marrow Donor Association criteria, reporting the identified gaps, and issues that need update.

- Research reports prepared on blood banking:
 - An evaluation report regarding the application, which includes a review of legislation and literature analyzing the current implementation of the “Clean Area” requirements defined in GMP practices and the processes of improving the infrastructure in this way.
 - Evaluation report on the quality control methodology for Apheresis Platelet Concentrate.
 - Monkeypox Disease guideline evaluation information note.
 - Evaluation report on the practical training of external students attending Blood Banking and Transfusion Medicine Training.
 - Evaluation reports on large-capacity mobile team organizations.

Licensing Procedures

The collection, testing, processing, storage, distribution of blood and blood components, the import of blood and blood components, except for the import of plasma for product production, and the monitoring of transfusion are carried out only by licensed service units in accordance with the regulations. In this context, license renewal works and procedures for 5 BDCs were coordinated. The relevant audits and license renewals were successfully completed. In addition, 18 applications were coordinated for the responsible physician process, which is among our legal obligations according to regulations.

Pharmaceutical Quality Management System Activities

The Facility Master File preparations of the RBCs (European RBC, West Anatolia RBC, East Anatolia RBC, Central Anatolia RBC, North Marmara RBC, Central Mediterranean RBC, Central Anatolia RBC, Central Black Sea RBC) included in the Plasma Fractionation Project were coordinated in line with the specified requirements and the files were revised after the necessary checks.

Improvements initiated based on national and international authority audits as part of Good Manufacturing Practices were monitored and reported.

Management Review Meeting

Quality Management System is reviewed at planned intervals to ensure its consistency with the strategic direction of our organization. The review in 2024 was carried out in two stages. The first stage is implemented twice a year in our 18 Regional Blood Center Offices. The outputs of all these review activities are evaluated annually under the management of the Blood Services Directorate General, thus ensuring system effectiveness. By monitoring these meetings

and decisions taken at the Regional Blood Center Offices, the inputs of the management review meeting are created and evaluated by our senior management in order to improve the system. In this context, the Management Review Meeting was held on 28 March 2024 with the participation of senior managers.

Continuing Education Activities

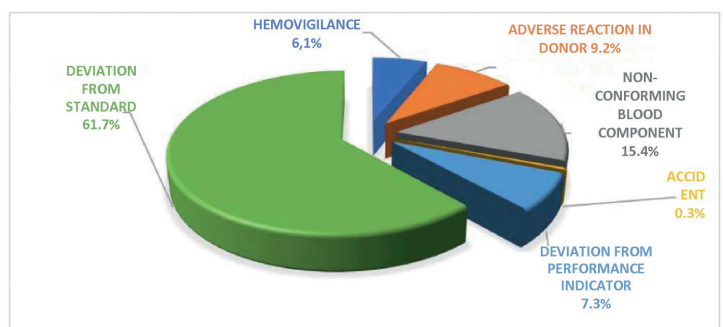
In order to ensure awareness on the importance of the activities performed by the Blood Service Unit staff and product/service conformity and to achieve the quality management system goals, training processes are managed by the Quality Assurance Unit in line with the in-house training plan.

In this context, our employees at various levels and positions were trained throughout the year on deviation management, good documentation practices, quality management system review and management of improvement actions.

Nonconformities found out in the fields of activity were analyzed. Following the evaluations, it was observed that non-compliance with the good documentation practices instructions was repeated. In this context, training content was prepared as part of good documentation practices instruction in cooperation with the Red Crescent Academy and the created training program was opened to all relevant staff via LMS to raise awareness. Following this training, it was decided to increase training content via LMS so that staff could access information whenever they were available, taking into account the busy and variable working hours, and accordingly process was initiated.

Report Management System and Management of Improvement Actions

All unplanned situations that have the potential to affect the product or service, depending on the impact areas of the work and operations carried out at the institution, are recorded in the Blood Quality Management System Software and managed as part of the deviation management process. Based on the decision to manage the evaluated situation as a deviation, product impact analysis and risk assessments are carried out for all deviations, and for situations determined to be systematic, root cause analyses are carried out and improvements are effectively achieved. By conducting process and process-related analyses, deviation trends are evaluated. 29,845 deviation reports were recorded in 2024, and the distribution of these deviation reports is shown in the graph below.



Distribution of Deviation Reports initiated in 2024 by Report Category

2,172 corrective actions were initiated for deviation reports requiring improvement.

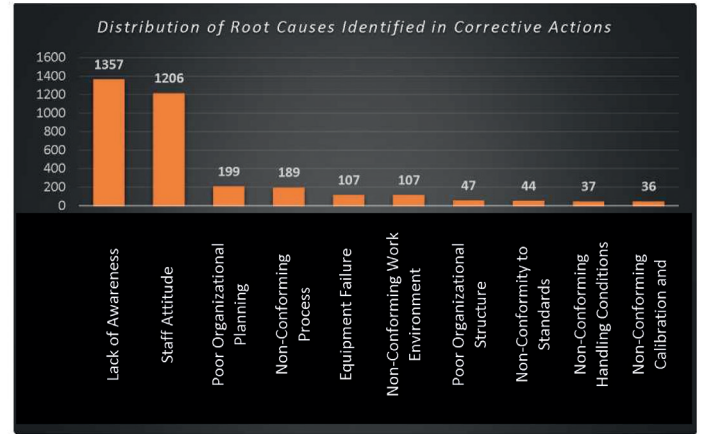
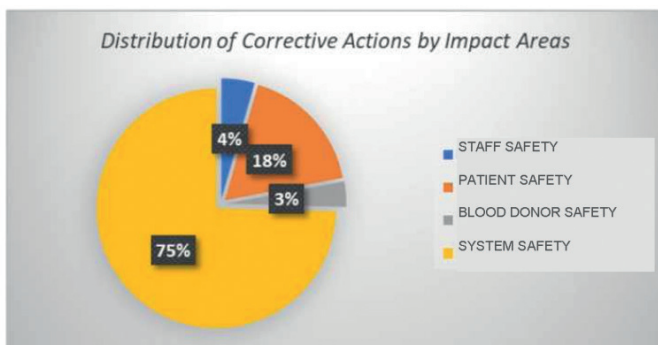
In addition, 16,978 SCC reports and 6 Near-Miss Event reports were recorded in 2024, and the process monitoring and improvement activities of these notifications were followed up.

It is the area of responsibility where corrective and preventive actions are managed to identify potential or detected nonconformities as areas open to improvement, eliminate their causes and prevent recurrence. Continuous development of the system is ensured through improvement actions.

Responsibility for taking relevant actions in the process in question belongs to the process owners. While the appropriateness of the action is verified on-site by the Quality Assurance Experts of RBC according to the identified area, in case of a critical finding, the on-site determination of the improvement following the risk analysis is re-examined and verified by the Department's Quality Monitoring Experts depending on the level of complexity of the interacting processes.

Root cause and error impact analyses are performed by recording them in the Blood Quality Management System Software and the identified actions are defined into the system in steps. By combining related actions and identifying situations that trigger each other, duplicate records in the system are prevented. Where more than one root cause is identified, their potential effects are evaluated and prioritized, and actions are assigned according to action plans. When the distribution of improvement activities according to impact areas is examined, it can be stated that 75% of the actions were carried out under the title of system security, followed by patient safety with 18%, and the remaining percentage was developed in the impact areas of employee and blood donor safety. The graphs below show the distribution of corrective actions initiated as of 2024 according to root causes and impact areas. Accordingly, the distribution of root causes that were mostly selected for a total of 2,997 corrective actions can be examined:

2024 Yılında Başlatılan Düzeltici Faaliyetlerin Etki Alanlarına Göre Dağılımı



Distribution of the Most Commonly Identified Root Causes in Corrective Actions Initiated in 2024 (Top 10)

Process Evaluation Activities

The accuracy and appropriateness of the records made by the Blood Service Units regarding nonconformities that occur during operation or are detected in routine inspections are monitored daily by the Quality Assurance Unit. Critical nonconformities that arise during the process and SCC reports directed by our stakeholders are also reported to senior management on a daily basis. In addition, RBC Quality Assurance Specialists are supported with instant interventions for detected errors, both technical and operational, to ensure the effective execution of the process.

Activities of Quality Monitoring Unit

Our blood banking activities, carried out by our Blood Services Directorate General in line with regulations, are continuously improved by closely monitoring developments in our country and around the world.

Monitoring activities are carried out on the Blood Quality Management System (BQMS) Software. In order to ensure the effective use of the software, the relevant sections of the BQMS Guide and User Guide are also kept up to date. During the year, studies are carried out to improve the Blood Quality Management System (BQMS) Software, to eliminate error sources by analyzing the reports and requests received regarding the BQMS software and the findings reported in the examinations..

Audit Management Activities

The main objective is to verify the conformity of the Blood Quality Management System established as part of the standards and Good Manufacturing Practices (GMP) by which the Blood Services Directorate General and all Blood Service Units are certified. In this context, the accuracy of the audited processes, the adequacy and qualification of resources, the effectiveness of improving areas open to improvement to prevent recurrence, and the observation of risks and opportunities according to their impact areas are among the inputs of the audit processes. Raising staff awareness during the audit stage is another goal of quality monitoring activities. In order to continuously review the minimum requirements during audits, process-based checklists are available to our Quality

Assurance Specialists. These lists are also used as a basis in desk audits. In this context, three different audit models are operated in the system. Desk audits, like other audits, are reported by selecting and reporting through the system, including audit evidence (samples) and with specific audit criteria. Although it is not designed as a separate model since it is mostly carried out before the audits, the nonconformities detected during this time are recorded, and even if corrections are made, they are included in the audit program and are subject to the first audit performed. At the beginning of each year, critical control points that need to be reviewed in terms of the effectiveness of the audit system in internal audits, cross-audits and self-assessments are evaluated in terms of their up-to-dateness, especially in terms of legislation, and audit documents are created annually.

The Quality Monitoring Activities model was designed using the term “audit” instead of “inspection”, aiming to identify conformity on-site. Our auditors undergo routine training to increase their competence on an annual basis, and their competence is secured by receiving training from certified institutions and organizations. The resources to provide annual training are allocated from the budget. Training needs analyses are the result of process analyses in which auditors and the audits performed are evaluated. Our staff who pass the evaluation exams at the end of the training can carry out quality monitoring activities.

A workshop was held between 24-26 December 2024 to determine the critical control points that need to be reviewed in internal audits, cross-audits and self-assessments in order to increase the effectiveness of the audit system.

Our auditors conduct audits within Department or RBC Office to which they are affiliated as “cross-audits” and audits covering all activities of the manager to which they are affiliated as “self-assessments”. This audit model has been designed according to the European Union Blood Inspection System (EUBIS) standards.

Internal audit activities, which are a requirement of integrated quality management, are included in the annual budget planning with the approval of the President and are carried out once a year with the “internal audit” structure, where all processes are observed in all blood service units and Directorate General units and are audited with a holistic approach.

As part of the Audit Management Procedure, BSDC Self-assessment is carried out at least once a year, RBC self-assessment at least 4 times a year, RBC cross-audit at least 6 times a year, and blood donation area audit at least once a month depending on the defined criteria.

In 2024, internal audits were carried out within the framework of risk management in 18 Regional Blood Centers and 68 affiliated Blood Service Units. No

internal audit was carried out in 2024 for the Iskenderun Blood Donation Center, which was damaged by the earthquake disaster in 2023.

In addition, our inspection processes were supported with on-site and unannounced audits when deemed necessary. The figure below shows the inspections carried out as of the end of the year. Accordingly, a total of 1,565 cross-audits, 84 self-assessments and 87 internal audits were conducted.

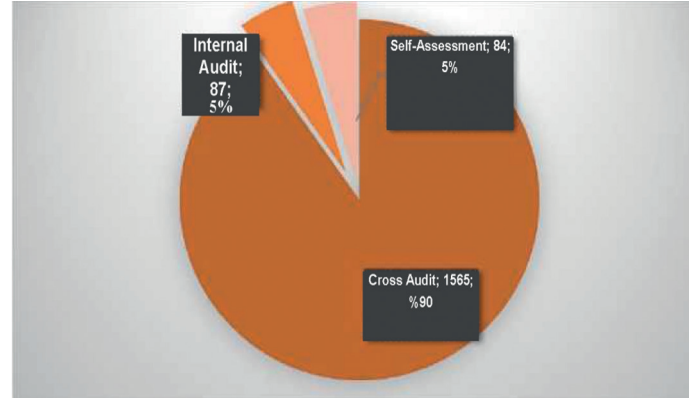


Figure: Distribution of Audits Conducted in 2024

In addition to in-house audits, surveillance audits of the Integrated Blood Quality Management System were carried out in 2024 by RoyalCert Certification Institution as part of TS EN ISO 9001:2015 Quality Management Systems Standard and TS ISO 10002:2018 Quality Management-Customer Satisfaction-Complaint Handling Standard in Organizations at Siirt Blood Donation Center, North Marmara Regional Blood Center (Istanbul), Eskişehir Blood Donation Center, Nevşehir Blood Donation Center, Southeast Regional Blood Center (Van), Ağrı Blood Donation Center, Yalova Blood Donation Center, Central Anatolia Regional Blood Center (Ankara) and Turkish Red Crescent Blood Services Directorate General and were completed successfully.

Finding Management Activities

The findings identified and reported through audits and inspections carried out within the context defined above as part of Audit Management are the areas of the system that are open to improvement. The samples collected, including the reference standard/document items of the findings, are recorded in the system and can be added to the report with the file upload feature if deemed necessary. A link to the report is sent to the process owners via e-mail. Evaluation of the findings is carried out by providing a software connection via the link sent by the process owners.

Just as the findings are described, the refusal process must also be justified by including reference information. The refusal of the finding is approved by the Audit Team Head and/or Quality Assurance Specialist if no regulatory violation exists. Refused findings are reported annually to the relevant Department to ensure that the processes are reviewed for accuracy.

Self-assessment, cross-audit and internal audit analyses were conducted on the basis of RBC and BDC, and meetings were held with the relevant centers.

The distribution of findings reported in the system according to their characteristics is as follows:

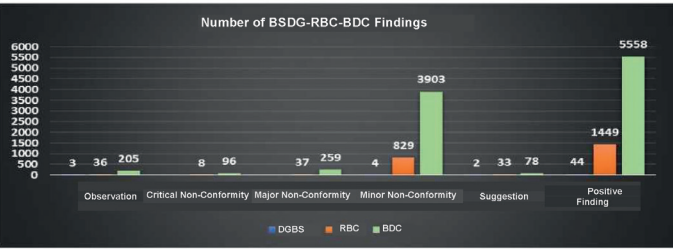


Figure: Distribution of 2024 Audit Findings by Nature

Activities of Quality Conformity Unit

Within the framework of the Quality Management System, Quality Conformity Unit is responsible for monitoring the records as part of Good Manufacturing Practices, the control of process activities, especially validation and qualification management, and the analysis and improvement of nonconformities detected regarding product conformity. In this context, reporting and review activities are carried out periodically and deviation and change control processes are put into standard practice.

As part of BQMS Authorization studies, awareness training was provided to the staff of the Blood Services Directorate General and a total of 21 staff of Regional Blood Center on 29.08.2024.

Considering that the training requested for staff of Department of Quality and Strategic Management, and the Quality Assurance Unit Manager and Quality Assurance Specialists of Regional Blood Center will be beneficial for the staff in order to improve their professional competencies and to raise awareness on their personal development both as part of the Plasma Fractionation Project and for increasing workloads, the following trainings were carried out within the Red Crescent Academy and the Information and Communication Technologies Authority (BTK Academy) in 2024.

Training Name	Institution Name	Number of Attendees
E-Mail Correspondence Rules Training	Red Crescent Academy	75
Effective Communication and Teamwork	Red Crescent Academy	74
Self-Awareness Tips Training	Red Crescent Academy	74
Effective Telephone Communication Training	Red Crescent Academy	73
Thinking Training	Red Crescent Academy	74
Emotional Intelligence Training	Red Crescent Academy	74
Competencies Training	Red Crescent Academy	73
Performance and Productivity Training	Red Crescent Academy	73
Touches to Our Lives Training	Red Crescent Academy	73
Microsoft Word Basics	BTK Academy	71
Microsoft Excel Basics	BTK Academy	70
Microsoft PowerPoint	BTK Academy	45

As part of our Integrated Quality Management System and the set of standards implemented, including national regulations, the following trainings were provided to staff of Department of Quality and Strategic Management and the Quality Assurance Unit Manager and Quality Assurance Specialist staff of Regional Blood Center in order to improve auditing effectiveness, review updated requirements, and improve routine audits with a risk-based approach.

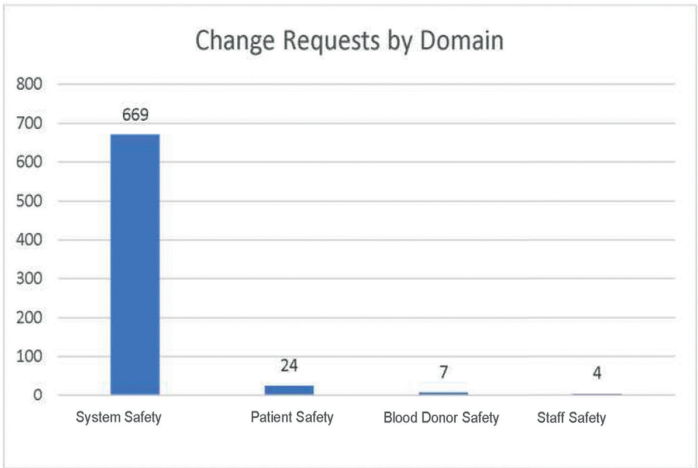
Training Name	Number of Attendees
ISO 9001:2015 Quality Management System Standard Information and Internal Auditor Training	59
ISO 10002 Customer Satisfaction Management System Information and Internal Auditor Training	90
ISO 22301 Business Continuity Management System Information and Internal Auditor Training	77
ISO 27001 Information Security Management System Information and Internal Auditor Training	77
Business Impact Analysis Methods and Applications Training in Business Continuity	15

Change Control Management Activities

Change management applications have been incorporated into the system to reduce risk, ensure Good Manufacturing Practice requirements, prevent potential problems by investigating the possible consequences of changes, and determine how all related work and processes should be carried out.

Any issue that may affect the identity, quality, efficacy or purity of a product or require an update in the licensing process, affect validation, directly or indirectly affect the product's properties, affect the production method, or affect the qualification status of the device or equipment used are projected by planning actions in the Blood Quality Management System Software. In this context, within the framework of the risk-based approach, 704 change requests were recorded and processed in our system in 2024.

Change requests by domain in 2024 are presented in the chart below:



Review of Technical Specifications for Conformity with the Quality Management System

The Quality Conformity Unit has the duty to evaluate the documents created in the Technical Specifications commissions in terms of their conformity with the quality management system and to participate in the relevant commissions. As part of this task, 20 technical specifications were reviewed by participating in the relevant commissions in 2024.

Evaluation of Buildings Constructed for Blood Service Units in Terms of Quality Processes

The building construction/renovation projects of Blood Service Units are evaluated in terms of compliance with legal regulations and instructions, and participation in relevant commissions is ensured.

In 2024, the preliminary projects of 2 Regional Blood Centers and the project plan stages of 8 Blood Collection Units were reviewed and analyzed in terms of quality processes.

Document and Legislation Activities

As part of Plasma Fractionation, the qualification of the production areas (blood donation/component preparation/inventory management/laboratory area, etc.) and the equipment and hardware used are monitored, evaluated, and the adequacy of documentation is checked. For this purpose, analyses are carried out regarding the adequacy and currency of the documents included in the fractionation processes and the suitability of revision requests and applications in terms of quality management processes is evaluated.

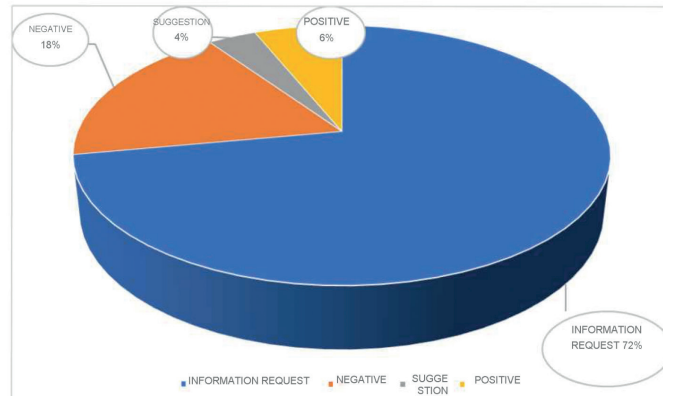
Validation Processes of the Software Systems Used

Impact analysis evaluation for the validation needs of software systems used in Blood Service Units, documentation (Validation Plan, Validation Report, FMEA Risk Management Studies, etc.) and evaluation and approval processes were carried out from a quality risk management perspective regarding the execution of process management in accordance with the procedures. As part of the validation processes of the Blood Quality Management System, an authorization matrix was created for all users within the Blood Services Directorate General and transferred to the software, and demand management processes were carried out through the JIRA application. Participation was made in periodic reviews of the validation requirements of validated software used within Blood Services Directorate General.

Satisfaction, Comment and Complaint Management Activities

The 2024 SCC reports, which were open, exceeded the response period and were not answered, were analyzed and communicated to the relevant Blood Service Units via e-mail. 16,978 SCC notifications were recorded in

2024, and the distribution of reports by category is shown in the graph below.



Activities of Quality and Standards Unit

Quality Management System Documentation Management

Quality and Standards Unit carries out processes and procedures related to the preparation, publication, review, revision management and cancellation of documents through the Blood Quality Management System Software, and the monitoring of the controlled use of documents.

A total of 1,554 documents are currently managed in the Blood Quality Management System Software. Among these documents, the total number of legislation, referred standards and reference sources defined as external documents is 744, while the total number of studies, instructions and circulars regarding the internal regulations of the Institution is 79 and they are managed in the process as supporting sources. The remaining 731 documents consist of the Quality Manual, procedures and instructions, and forms and notebooks where records are kept.



As of the end of the year, a total of 74 new documents were published. The distribution of documents is as follows:

New Publications	Number
Form	26
Equipment Management Procedure	3
Administrative Procedures	14
Quality Management Documents	1
Supporting Document	2
Validation Documents	1
External Document	22
Production Procedures	1
Hemovigilance Procedures	1
Book	1
Process Documents	2
TOTAL	74

All our staff can submit revision requests for documents through the system by citing the source. Requests are evaluated by review committees within the framework of risk management without waiting for the document review period. There were 174 revision requests recorded in the system during the year. The number of revision requests answered and closed in the system is 129, and the remaining requests are still under evaluation.

In addition, the revision of 125 documents was coordinated in line with the requirements, and 54 documents that were outdated were repealed.

Updated Documents	Number
Form	71
Equipment Management Procedure	14
Quality Management Documents	7
Production Procedures	10
Administrative Procedures	14
Test Procedures	2
Hemovigilance Procedures	2
Process Documents	4
Validation Documents	1
TOTAL	125

External and supporting documents that have a regulatory effect on Blood Services Activities are also managed within the Document Management System, and the monitoring and control process is carried out in coordination with the relevant units of the Blood Services Directorate General. In this context, 22 legislation and/or standards were included in the system, 70 documents were updated, and 141 outdated documents were removed from the file portal.





BUSINESS CONTINUITY OFFICE

The activities carried out by the Business Continuity Office include monitoring and reporting the medium and long-term strategies and policies of the blood services activity area as part of Turkish Red Crescent Strategic Plan (SP); managing the BSDG Annual Performance Management processes established to monitor activities that will achieve SP targets and perform short-term analyses of system effectiveness; and managing the processes of analyzing and evaluating risks and opportunities as required by risk-based management.

Business Continuity Office was established in 2018 within Department of Quality and Strategic Management. The office is briefly established to “Develop a Sustainable Blood Service Model, improving functional effectiveness and process efficiency.” Although the organizational process of office was put on hold during the pandemic, operations, processes and procedures are carried out within the Department. The activities and processes carried out, coordinated, monitored and evaluated by the Office include:

- The basis of the integrated quality management system is risk management. The effectiveness of the system is reviewed and reported through

various analyses (value stream, process mapping, etc.).

- Turkish Red Crescent Excellence Model practices are carried out and reported in the coordination of Turkish Red Crescent Association.
- Among the business-specific analysis methods, methods such as context determination, risk and opportunity analysis, support for strategic decisions by performing stakeholder and problem analyses, Failure Mode and Effects Analysis are frequently used, and with these analyses, processes are being improved in line with corporate strategies.
- As part of the Association’s strategic planning, monitoring and evaluation activities, field of activity functions are coordinated and reported to the Strategy Committee.
- Process-automation systems analyses are performed and reported on the basis of data integrity.
- Control methodologies of critical processes are reviewed and evaluated in terms of performance effectiveness.

Activities of Strategic Management Unit

Business Continuity Activities

As part of creating a blood services model for business continuity, a Disaster Management Planning Commission was established to determine strategies for extraordinary situations that may cause interruptions in critical processes identified through business impact analyses, to analyze risks, to evaluate the adaptation of business processes by examining good practices, and to create business continuity plans to return to an acceptable service level in the fastest and safest way with the least loss in the event of an interruption.

Business impact and risk analyses were performed and reported on the basis of management information systems. In order to establish a business continuity management system that will cover all processes in Blood Services and to ensure its applicability, gap analysis and system modeling were studied and reported.

In addition to the functions detailed below under the headings within the Office, the activities carried out are as follows:

- Coordination and reporting activities are carried out on the basis of business units in line with the reporting needs and demands of Turkish Red Crescent senior management. Reporting entries are provided to the decision support systems used by the Head Office.
- Work studies are carried out according to blood service unit or process interactions as part of productivity analyses that will ensure effective management of processes. Workflows and optimization suggestions are created to increase efficiency in various business units. As part of these studies, needs-based studies such as standard workforce durations, minimum space usage design studies, workload analyses, job modeling and simulation are carried out.

Risk Management

Blood Quality Management System is managed on a risk-based basis in accordance with ICH-Q9 Quality Risk Management Guidelines, which are accepted in the Quality by Design principles. As part of the Risk Management Process, risks and opportunities were identified within the framework of the ISO 9001:2015 Standard and integrated management was modeled. Risks and opportunities are monitored and evaluated annually in line with institutional strategies. In risk assessment studies, risks are scored using five-point Likert scales for probability, detectability and severity, and risks are managed by ranking them according to their importance. The review of these risk assessment studies is handled within the management review process. A needs analysis was conducted for corporate

software solutions related to risk management and reported for the software solutions procurement work carried out by Red Crescent Technology.

Training is provided as needed to ensure the effectiveness of risk management processes.

As part of Blood Services Risk Management processes, risk analysis updates were carried out at the Blood Service Units (RBC and BDC) level, and critical risks were identified by prioritization. While analyzing risks, the effectiveness of the process or staff and the adequacy of the system (software, infrastructure, devices, facilities, etc.) are reported according to the impact areas affected by Blood Services activities. The figure below shows the association rates of critical risks identified in 2024 with their impact areas:

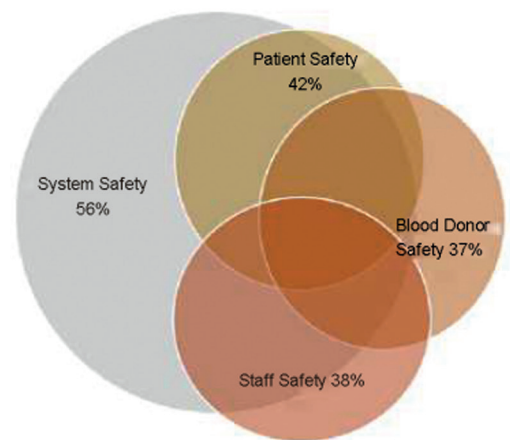


Figure: Distribution of Critical Risks by Impact Areas in 2024

As part of updating the Risk Assessment works for 2024, it is observed that a total of 246 improvement activities have been initiated, including those initiated during the year, as part of risk reduction works that keep the effects of risks assessed at a critical level under control.

When the risks improved in this context were investigated, it was found out that 53% of minor risks, 80% of possible risks, 67% of major risks and all of the top-priority risks were improved.

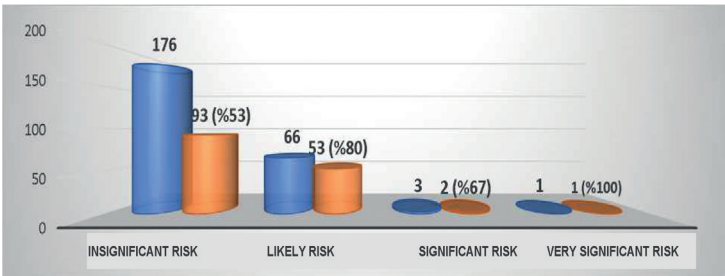


Figure: Improvement Rates by Risk Classification

Strategic Management Activities

As part of Strategic Planning works carried out by Turkish Red Crescent Directorate General, analyses such as Blood Services Activity Analysis, Due Diligence Analysis, Legislation Analysis and Stakeholder Analysis are carried out and included in the Blood Quality Management System. The determination of Strategic Plan targets was carried out in coordination with the Directorate General functions, and annual performance program studies were carried out as part of monitoring and evaluation activities. Performance program realization data regarding strategic indicators were reported through institutional decision-support information systems. Performance program monitoring reports were prepared quarterly. As part of the Strategic Plan 2025 update process, planning (Goal-Strategy-KPI) and performance program updates were prepared and reported.

The strategies and activity analyses, organizational structures and functions of the organizations, especially the blood organizations of the national Red Crescent-Red Cross Societies that are members of the Federation, for the blood supply systems of all blood supply countries are regularly monitored and reported.

In addition to process risks, institutional risks related to Blood Services are also studied, providing an input into decision-making processes. As part of Turkish Red Crescent Goal 2030, the 2021-2030 Strategic Plan and periodic performance program targets, which are in effect, have been linked to Blood Services performance indicators, and 94 institutional risks have been addressed in the areas of main service processes related to blood services (donor relations management, blood donation, component preparation, component distribution, cold chain, laboratory tests), supply and inventory management, digital infrastructure, quality management, human resources, stakeholder relations, national and international legal regulations, physical infrastructure capacity and rehabilitation management, and financial risks in order to ensure achievement of the goal.

Most of the institutional risks have been reduced to acceptable levels through existing controls or improvement activities in the system, and some risks are kept under control and accepted with justification. Examples of these risks include financial risks such as excess expenses in line with the Ministry's SUT pricing, increased costs due to exchange rates due to the procurement of material and technology infrastructure from abroad, infrastructure/technology risks related to information management system revisions that have not yet been completed in line with the priorities of information technology business partners, risks related to workforce resources due to difficulties in finding/maintaining a qualified workforce, and risks related to customer satisfaction due to the waiting for the implementation of the corporate integrated systems of

the association, in which the Blood Services is not the executive but a stakeholder, are considered justified risks.

Studies on determining strategies and risks related to Turkish Red Crescent Strategic Goals were initiated by the Department of Institutional Development and Department of Institutional Risk and Audit. Studies were initiated in coordination with BSDG.

As part of productivity research, modeling and simulation studies were carried out using study data for blood donation organizations.

As part of our institution's Climate Change efforts, a contribution was made to the "Workshop on Determining Turkish Red Crescent Climate Change Adaptation Program" by comparing the studies of the federation countries.

As part of benchmarking studies, alternative production models were examined and participation in value stream mapping studies was ensured.

ISO 22301 Standard Training was provided to the staff of Department of Quality and Strategic Management and Regional Blood Centers Quality Assurance Unit Managers (77 people) in order to ensure that the organization is planned and prepared based on the risk approach in case of an interruption, to ensure and improve business continuity, to maintain business processes in crisis situations, and to provide knowledge and skills on business continuity.

As part of business continuity, "Business Impact Analysis Methods and Applications Training" was provided to staff of Department of Quality and Strategic Management (15 people) as part of preparing and reporting efficiency and effectiveness analyses and carrying out business impact analyses, and the relevant training was recorded and documents and training were shared with the staff of Regional Blood Centers Quality Assurance Unit Managements.

Blood Services Performance Management

Our primary goal is to produce the highest level of sustainable value through product/service delivery in Blood Services, which is monitored and evaluated through the Blood Quality Improvement Program. A holistic management system was created and integrated with the Integrated Blood Quality Management System Conditions, Institutional Strategic Management Approach and EFQM Excellence Model studies.

Analyses and necessary revision studies on performance indicators are carried out as part of review and revision studies in six-month periods. In this context, RBC opinions are compiled, and RBC opinions, monthly realization trend analyses and improvement suggestions are shared with the responsible units of BSDG. With the coordination of the responsible units

of BSDG, the indicator set is updated, submitted for approval and published.

Forty (40) Key Performance Indicators (KPIs) have been defined for 2024 as part of the impact areas determined as Blood Donor Safety, Patient Safety, Employee Safety and System Security.

The updating, development and adaptation needs of reporting tools created in information management systems related to indicators are coordinated by Office, and are carried out by Red Crescent Technology service providers.

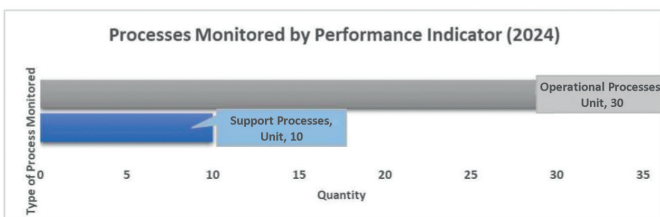
Performance indicators determined as part of the Quality Improvement Program are monitored by the relevant units of the Directorate General and reported periodically to our blood service units. During the year, 598 improvement actions were initiated on a service unit and period basis for indicators that deviated from acceptable values for various reasons.

In order to improve the reporting efficiency of deviation records, necessary adaptations are made in software solutions and published on the Power BI platform with the dashboard called "Performance Indicators".

In order to monitor performance and ensure that necessary improvements are made, deviation and activity records initiated regarding deviations from target performance indicators reported to the Business Continuity Unit by Regional Quality Assurance Specialists are consolidated and reported to the BSDG Quality Assurance Unit.

As part of monitoring and evaluating performance, root cause and activity analyses of deviations and remedial action records initiated regarding indicators are carried out and reported.

The figure below shows the distribution of Key Performance Indicators of the Blood Services Directorate General by process:



Processes Monitored by Performance Indicator

ABBREVIATIONS

EDQM: European Directorate for the Quality of Medicines

TMDA: Turkish Medicines and Medical Devices Agency

ICH-Q10: International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use, Pharmaceutical Quality System

QMS: Quality Management System

EFQM: European Foundation for Quality Management

SAP: Systems Applications and Products

SRM: Supplier Relationship Management

ISBT: International Society of Blood Transfusion

ABCT: Association of Blood Centers and Transfusion

NAT: Nucleic Acid Test

SSI: Social Security Institution

FDA: Food and Drug Administration

SCDC: Stem Cell Donor Center

RBC: Regional Blood Center

BDC: Blood Donation Center

BBIMS: Blood Banking Information Management System

LDAP: Lightweight Directory Access Protocol

BQMS: Blood Quality Management System

LIS: Laboratory Information Systems

ES: Erythrocyte Suspension

FFP: Fresh Frozen Plasma

PPS: Pooled Platelet Suspension

APS: Apheresis Platelet Suspension

GMP: Good Manufacturing Practices

NUMBER OF BLOOD DONATIONS IN 2024													
BLOOD CENTERS	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY	AUGUST	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	TOTAL
ANKARA BDC	12.344	14.284	11.342	13.721	13.731	9.488	10.611	11.176	10.164	12.233	10.527	12.521	142.142
BATI BDC	6.751	7.365	6.247	7.243	7.703	5.434	6.385	6.962	7.080	7.011	6.150	6.182	80.513
KONYA BDC	5.829	7.435	4.378	5.731	8.578	5.074	6.707	7.268	6.637	6.767	6.434	7.514	78.352
ÇORUM BDC	1.537	1.551	856	1.355	1.213	877	1.094	1.200	1.161	869	606	1.205	13.524
KASTAMONU BDC	746	817	2.207	617	1.171	1.039	1.442	1.065	1.878	449	733	1.739	13.903
REGIONAL TOTAL	27.207	31.452	25.030	28.667	32.396	21.912	26.239	27.671	26.920	27.329	24.450	29.161	328.434
ESKİŞEHİR BDC	2.981	3.314	2.671	3.444	3.268	1.743	2.652	2.857	3.190	3.517	3.452	3.703	36.792
KÜTAHYA BDC	1.939	2.219	1.717	2.320	2.701	1.764	2.068	2.037	2.491	2.209	1.972	2.103	25.540
AFYON BDC	1.862	1.979	904	1.551	2.255	1.730	1.265	1.135	1.322	2.098	2.088	1.815	20.004
REGIONAL TOTAL	6.782	7.512	5.292	7.315	8.224	5.237	5.985	6.029	7.003	7.824	7.512	7.621	82.336
KAYSERİ BDC	6.964	6.835	4.351	6.010	8.233	6.428	7.669	8.828	7.264	5.912	6.371	7.419	82.284
SİVAS BDC	1.300	1.401	992	1.288	2.248	992	1.706	1.466	1.550	1.696	1.422	1.208	17.269
NEVŞEHİR BDC	1.008	799	519	663	1.239	579	656	719	1.177	809	837	1.016	10.021
KIRŞEHİR BDC	559	827	492	495	603	594	533	203	518	960	656	621	7.061
YOZGAT BDC	1.115	1.370	311	982	1.164	1.136	1.351	381	625	1.112	878	517	10.942
REGIONAL TOTAL	10.946	11.232	6.665	9.438	13.487	9.729	11.915	11.597	11.134	10.489	10.164	10.781	127.577
GAZİANTEP BDC	8.422	8.645	7.230	8.736	14.805	6.575	8.528	9.033	8.730	9.159	8.050	8.077	105.990
KİLİS BDC	603	200	335	693	920	560	712	521	753	41	165	771	6.274
ŞANLIURFA BDC	5.512	5.143	4.260	5.038	6.007	2.836	3.583	4.970	5.340	5.212	4.410	5.067	57.378
K.MARAŞ BDC	718	1.782	1.106	1.181	3.393	1.379	1.452	1.866	2.041	1.934	1.806	2.045	20.703
REGIONAL TOTAL	15.255	15.770	12.931	15.648	25.125	11.350	14.275	16.390	16.864	16.346	14.431	15.960	190.345
MALATYA BDC	1.400	1.980	1.021	2.121	2.503	1.245	1.732	1.920	2.510	2.654	2.539	2.307	23.932
ELAZIĞ BDC	1.566	1.610	964	1.491	2.457	1.347	1.660	1.814	2.003	1.987	1.915	2.126	20.940
ADYAMAN BDC	694	770	331	429	1.155	672	804	907	1.213	1.289	1.212	800	10.276
REGIONAL TOTAL	3.660	4.360	2.316	4.041	6.115	3.264	4.196	4.641	5.726	5.930	5.666	5.233	55.148
ADANA BDC	13.343	13.245	11.324	14.172	14.812	8.610	12.060	12.493	12.795	11.529	11.803	12.380	148.566
İSKENDERUN BDC *	-	-	-	-	-	-	-	-	-	-	-	-	-
MERSİN BDC	6.258	6.615	5.783	5.714	6.755	3.850	4.738	5.052	5.201	5.514	5.349	5.846	66.675
REGIONAL TOTAL	19.601	19.860	17.107	19.886	21.567	12.460	16.798	17.545	17.996	17.043	17.152	18.226	215.241
DIYARBAKIR BDC	4.360	4.682	2.651	3.662	5.095	3.635	4.334	4.170	4.809	4.752	4.374	4.436	50.960
MARDİN BDC	1.218	1.541	694	1.529	1.686	1.221	885	1.353	1.448	1.021	1.167	1.086	14.849
SİİRT BDC	311	1.400	631	486	630	429	407	566	468	626	550	1.042	7.546
BATMAN BDC	923	1.420	1.058	1.618	1.842	640	1.078	1.165	1.251	825	901	1.323	14.044
REGIONAL TOTAL	6.812	9.043	5.034	7.295	9.253	5.925	6.704	7.254	7.976	7.224	6.992	7.887	87.399
ÇAĞA BDC	13.497	16.017	14.631	14.096	16.523	12.028	14.048	14.173	14.130	15.152	14.567	15.015	173.877
BAŞAKŞEHİR BDC	8.386	9.610	9.289	10.991	13.749	9.659	12.544	13.262	13.977	14.429	11.113	11.656	138.665
EDİRNE BDC	1.256	1.423	1.403	1.329	1.606	1.110	1.178	1.082	1.221	1.602	942	1.531	15.683
LÜLEBURGAZ BDC	800	724	917	1.022	920	768	818	481	747	1.290	773	837	10.097
ÇORLU BDC	2.737	2.794	2.670	2.783	3.143	1.779	2.233	2.796	2.939	3.633	2.645	2.961	33.113
REGIONAL TOTAL	26.676	30.568	28.910	30.221	35.941	25.344	30.821	31.794	33.014	36.106	30.040	32.000	371.435
SÜMER GÜNAY BDC	8.180	8.368	7.459	7.174	8.696	5.303	6.373	7.472	6.828	6.207	7.507	7.772	87.339
Z.KAMİL BDC	6.391	6.981	6.463	6.841	8.174	6.015	6.079	6.325	6.885	6.543	6.032	6.006	78.635
ÇEKMEKÖY BDC	2.931	3.493	2.604	2.565	2.904	2.191	2.598	2.726	2.656	2.707	2.422	2.799	32.596
REGIONAL TOTAL	17.502	18.742	16.526	16.580	19.774	13.509	15.050	16.523	16.369	15.457	15.961	16.577	198.570
DÜZCE BDC	1.836	1.939	1.355	1.904	1.950	1.199	1.563	1.552	1.751	1.689	1.444	2.023	20.205
ZONGULDAK BDC	1.727	1.742	1.462	1.606	2.569	1.562	1.801	1.438	1.740	2.342	1.691	1.281	20.961
KARABUK BDC	1.124	1.617	1.051	1.540	1.644	689	1.682	880	1.088	2.063	1.017	1.099	15.494
SAKARYA BDC	2.679	2.963	2.625	2.977	3.535	2.102	2.924	3.476	3.315	3.324	3.250	3.331	36.501
İZMİT BDC	5.463	5.366	4.875	4.933	5.605	3.736	4.833	5.071	5.012	4.684	4.617	5.370	59.565
REGIONAL TOTAL	12.829	13.627	11.368	12.960	15.303	9.288	12.803	12.417	12.906	14.102	12.019	13.104	152.726
BURSA BDC	7.202	7.583	5.700	7.727	8.499	5.138	6.768	6.984	7.132	7.590	7.645	7.603	85.571
BAĞIŞKESİR BDC	3.519	3.026	2.618	3.029	3.754	2.045	2.618	2.676	3.185	3.107	3.123	3.050	35.750
ÇANAKKALE BDC	2.170	2.530	2.069	2.025	2.288	1.457	1.996	1.991	2.080	2.244	2.277	2.001	25.128
YALOVA BDC	1.030	1.076	1.129	1.200	1.475	1.098	1.200	1.166	1.014	1.268	1.162	1.198	14.016
REGIONAL TOTAL	13.921	14.215	11.516	13.981	16.016	9.738	12.582	12.817	13.411	14.209	14.207	13.852	160.465
İZMİR BDC	11.835	12.702	10.948	12.201	13.727	8.093	10.696	10.868	11.342	13.622	12.753	11.948	140.735
AYDIN BDC	3.438	3.829	3.261	3.811	3.934	2.001	3.335	3.169	2.793	3.931	3.366	3.205	40.073
MANİSA BDC	5.023	5.309	4.351	5.434	5.843	3.485	5.020	4.516	4.774	7.782	5.611	5.700	62.848
ÖDEMiŞ BDC	1.377	1.636	1.289	1.335	1.814	806	1.542	1.371	1.314	1.839	1.753	1.479	17.555
REGIONAL TOTAL	21.673	23.476	19.849	22.781	25.318	14.385	20.593	19.924	20.223	27.174	23.483	22.332	261.211
DENİZLİ BDC	3.953	3.787	2.794	3.461	3.923	2.379	3.634	4.010	3.540	3.895	3.294	3.413	42.083
UŞAK BDC	1.472	1.505	1.125	1.091	2.272	1.057	1.160	1.447	1.218	2.431	1.069	1.295	17.142
MARMARİS BDC	3.290	3.503	3.258	3.047	3.557	2.383	3.062	2.755	3.130	3.512	3.440	2.381	37.318
REGIONAL TOTAL	8.715	8.795	7.177	7.599	9.752	5.819	7.856	8.212	7.888	9.838	7.803	7.089	96.543
ANTALYA BDC	8.702	9.218	7.581	8.747	10.418	5.778	7.145	7.468	9.320	8.830	8.342	8.227	99.776
İSPARTA BDC	2.141	3.321	2.354	2.454	3.814	2.037	2.603	2.881	2.921	3.079	2.683	2.226	32.514
BURDUR BDC	977	1.030	527	744	1.209	834	891	869	1.049	1.400	860	1.079	11.469
REGIONAL TOTAL	11.820	13.569	10.462	11.945	15.441	8.649	10.639	11.218	13.290	13.309	11.885	11.532	143.759
ERZURUM BDC	2.120	2.126	1.805	1.044	3.150	2.413	1.614	1.392	3.076	3.520	1.600	1.612	25.472
ERZİNCAN BDC	1.306	1.206	1.230	600	1.641	1.245	1.487	1.247	1.458	1.562	1.396	1.143	15.521
KARS BDC	946	1.038	874	1.118	1.329	1.203	1.196	1.015	1.102	1.243	1.311	714	13.089
AĞRI BDC	463	997	624	687	1.453	1.190	1.515	637	1.400	1.335	1.453	901	12.655
REGIONAL TOTAL	4.835	5.367	4.533	3.449	7.573	6.051	5.812	4.291	7.036	7.660	5.760	4.370	66.737
VAN BDC	3.910	3.893	2.807	2.950	4.371	4.067	4.408	4.065	4.435	4.366	3.848	5.500	48.620
MUŞ BDC	651	662	398	588	951	565	657	696	677	817	575	188	7.425
REGIONAL TOTAL	4.561	4.555	3.205	3.538	5.322	4.632	5.065	4.761	5.112	5.183	4.423	5.688	56.045
TRABZON BDC	2.745	2.701	2.378	2.319	3.165	2.666	2.816	1.786	2.759	3.064	3.048	2.822	32.269
RİZE BDC	1.157	1.153	928	1.178	1.147	1.139	985	1.012	1.132	1.210	1.368	1.240	13.649
ARTVİN BDC	480	380	408	457	576	401	360	401	421	500	445	331	5.160
GÜMÜŞHANE BDC	507	502	631	558	678	554	535	551	452	684	701	576	6.929
GİRESUN BDC	1.323	1.546	1.114	1.221	1.737	1.252	1.359	909	1.351	1.458	1.448	1.442	16.160
REGIONAL TOTAL	6.212	6.282	5.459	5.733	7.303	6.012	6.055	4.659	6.115	6.916	7.010	6.411	74.167
SAMSUN BDC	4.024	5.117	3.149	4.229	6.121	2.790	4.113	3.922	4.066	5.591	5.198	5.126	53.446
ORDU BDC	2.445	2.434	1.798	2.485	3.328	2.058	1.957	1.786	2.586	2.613	2.363	2.289	28.142
TOKAT BDC	1.698	1.877											

BLOOD COMPONENTS PRODUCED IN 2024						
BLOOD CENTERS	APLT	ES	TDP	H-PLT	CRYO	TOTAL
ANKARA BDC	12.728	131.102	53.572	51.934	297	249.633
BATI BDC	3.399	77.426	31.101	0	275	112.201
KONYA BDC	0	77.797	35.656	0	670	114.123
ÇORUM BDC	0	13.444	8.099	0	6.503	28.046
KASTAMONU BDC	0	13.714	8.391	0	5.769	27.874
REGIONAL TOTAL	16.127	313.483	136.819	51.934	13.514	531.877
ESKİŞEHİR BDC	170	36.538	14.577	7.681	0	58.966
KÜTAHYA BDC	0	25.430	10.021	0	0	35.451
AFYON BDC	0	19.945	8.506	0	1.235	29.686
REGIONAL TOTAL	170	81.913	33.104	7.681	1.235	124.103
KAYSERİ BDC	0	81.740	25.429	10.587	28	117.784
SİVAS BDC	0	17.139	4.495	0	583	22.217
NEVŞEHİR BDC	0	9.924	3.979	0	1.259	15.162
KIRŞEHİR BDC	0	7.031	2.662	0	715	10.408
YOZGAT BDC	0	10.891	4.290	0	1.475	16.656
REGIONAL TOTAL	0	126.725	40.855	10.587	4.060	182.227
GAZİANTEP BDC	466	104.888	40.283	18.628	0	164.265
KİLİS BDC	0	6.194	2.309	0	0	8.503
ŞANLIURFA BDC	0	56.965	24.766	0	2.126	83.857
K.MARAŞ BDC	0	20.581	8.569	0	1.020	30.170
REGIONAL TOTAL	466	188.628	75.927	18.628	3.146	286.795
MALATYA BDC	0	23.869	11.123	8.701	675	44.368
ELAZIĞ BDC	0	20.869	9.143	0	329	30.341
ADİYAMAN BDC	0	10.249	5.543	0	263	16.055
REGIONAL TOTAL	0	54.987	25.809	8.701	1.267	90.764
ADANA BDC	6.283	142.697	68.169	30.831	1.245	249.225
İSKENDERUN BDC	0	0	0	0	0	0
MERSİN BDC	3.521	62.781	27.784	0	52	94.138
REGIONAL TOTAL	9.804	205.478	95.953	30.831	1.297	343.363
DIYARBAKIR BDC	0	50.571	22.996	9.047	0	82.614
MARDİN BDC	0	14.752	6.881	0	0	21.633
SİİRT BDC	0	7.491	3.849	0	20	11.360
BATMAN BDC	0	13.921	7.282	0	1.058	22.261
REGIONAL TOTAL	0	86.735	41.008	9.047	1.078	137.868
ÇAPA BDC	16.483	161.938	74.251	63.233	7.539	323.444
BAŞAKŞEHİR BDC	0	138.198	62.229	0	6.275	206.702
EDİRNE BDC	550	15.122	8.824	0	857	25.353
LÜLEBURGAZ BDC	0	10.060	5.597	0	520	16.177
ÇORLU BDC	312	32.717	16.150	0	1.717	50.896
REGIONAL TOTAL	17.345	358.035	167.051	63.233	16.908	622.572
SÜMER GÜNAY BDC	12.072	80.727	40.542	30.843	4.497	168.681
Z.KAMİL BDC	1.273	77.602	36.019	0	3.967	118.861
ÇEKMEKÖY BDC	0	32.505	15.562	0	1.632	49.699
REGIONAL TOTAL	13.345	190.834	92.123	30.843	10.096	337.241
DÜZCE BDC	0	20.140	8.002	18.407	0	46.549
ZONGULDAK BDC	0	20.919	7.936	0	1.315	30.170
KARABUK BDC	0	15.456	5.462	0	864	21.782
SAKARYA BDC	91	36.341	14.687	0	0	51.119
İZMİT BDC	1.659	58.075	24.424	0	0	84.158
REGIONAL TOTAL	1.750	150.931	60.511	18.407	2.179	233.778
BURSA BDC	800	84.848	42.958	20.221	0	148.827
BALIKESİR BDC	0	35.609	20.398	0	4.824	60.831
ÇANAKKALE BDC	0	24.997	9.243	0	1.896	36.136
YALOVA BDC	0	13.997	6.647	0	0	20.644
REGIONAL TOTAL	800	159.451	79.246	20.221	6.720	266.438
İZMİR BDC	8.437	133.501	53.918	25.967	0	221.823
AYDIN BDC	0	39.913	15.603	0	0	55.516
MANİSA BDC	1.255	61.608	17.094	0	2.428	82.385
ÖDEMiŞ BDC	0	17.438	5.298	0	0	22.736
REGIONAL TOTAL	9.692	252.460	91.913	25.967	2.428	382.460
DENİZLİ BDC	5.385	38.756	22.377	7.008	71	73.597
UŞAK BDC	556	16.662	9.612	0	2.897	29.727
MARMARİS BDC	2.088	35.511	22.088	0	19.056	78.743
REGIONAL TOTAL	8.029	90.929	54.077	7.008	22.024	182.067
ANTALYA BDC	455	98.529	42.472	19.398	376	161.230
İSPARTA BDC	0	32.365	13.885	0	847	47.097
BURDUR BDC	0	11.412	5.889	0	350	17.651
REGIONAL TOTAL	455	142.306	62.246	19.398	1.573	225.978
ERZURUM BDC	0	25.343	10.442	4.036	228	40.049
ERZİNCAN BDC	0	15.379	5.628	0	178	21.185
KARS BDC	0	12.971	5.028	0	104	18.103
AĞRI BDC	0	12.571	4.877	0	65	17.513
REGIONAL TOTAL	0	66.264	25.975	4.036	575	96.850
VAN BDC	14	48.437	23.343	4.066	0	75.860
MUŞ BDC	0	7.377	4.231	0	875	12.483
REGIONAL TOTAL	14	55.814	27.574	4.066	875	88.343
TRABZON BDC	1.718	30.902	13.292	8.837	0	54.749
RİZE BDC	457	13.263	6.058	0	0	19.778
ARTVİN BDC	0	5.133	2.711	0	1.909	9.753
GÜMÜŞHANE BDC	0	6.906	3.445	0	2.450	12.801
GİRESUN BDC	0	16.100	7.091	0	1	23.192
REGIONAL TOTAL	2.175	72.304	32.597	8.837	4.360	120.273
SAMSUN BDC	621	52.582	18.879	8.524	2.547	83.153
ORDU BDC	0	27.900	9.806	0	0	37.706
TOKAT BDC	0	19.074	6.657	0	0	25.731
AMASYA BDC	0	10.308	3.683	0	0	13.991
REGIONAL TOTAL	739	109.864	39.025	8.524	2.547	160.699
GRAND TOTAL	80.911	2.707.141	1.181.813	347.949	95.882	4.413.696

NUMBER OF BLOOD DONATIONS COLLECTED BY MOBILE CENTERS, BLOOD CENTERS AND BLOOD COLLECTION UNITS IN 2024						
	NUMBER OF TEAMS DEPLOYED		AMOUNT OF BLOOD COLLECTED			
	NUMBER OF CIVILIAN TEAMS	KAB (DAY)	BLOOD CENTER	CIVILIAN TEAM	KAB	TOTAL
ANKARA BDC	1.693	1.328	31.957	61.265	48.920	142.142
BATI BDC	1.108	732	-	28.079	52.434	80.513
KONYA BDC	1.424	705	-	59.113	19.239	78.352
ÇORUM BDC	138	341	-	4.698	8.826	13.524
KASTAMONU BDC	136	-	4.314	9.589	-	13.903
REGIONAL TOTAL	4.499	3.106	36.271	162.744	129.419	328.434
ESKİŞEHİR BDC	624	365	2.033	21.366	13.393	36.792
KÜTAHYA BDC	560	-	180	25.360	-	25.540
AFYON BDC	501	-	5.754	14.250	-	20.004
REGIONAL TOTAL	1.685	365	7.967	60.976	13.393	82.336
KAYSERİ BDC	1.424	243	1.190	77.470	3.624	82.284
SİVAS BDC	234	319	-	10.912	6.357	17.269
NEVŞEHİR BDC	219	-	1.094	8.927	-	10.021
KIRŞEHİR BDC	166	-	971	6.090	-	7.061
YOZGAT BDC	274	-	35	10.907	-	10.942
REGIONAL TOTAL	2.317	562	3.290	114.306	9.981	127.577
GAZİANTEP BDC	1.314	1.073	7.536	64.003	34.451	105.990
KİLİS BDC	120	-	877	5.397	-	6.274
ŞANLIURFA BDC	790	554	10	39.052	18.316	57.378
K.MARAŞ BDC	491	146	38	17.938	2.727	20.703
REGIONAL TOTAL	2.715	1.773	8.461	126.390	55.494	190.345
MALATYA BDC	417	488	-	12.281	11.651	23.932
ELAZIĞ BDC	553	26	35	20.432	473	20.940
ADIYAMAN BDC	190	-	3.009	7.267	-	10.276
REGIONAL TOTAL	1.160	514	3.044	39.980	12.124	55.148
ADANA BDC	390	2.057	33.517	25.771	89.278	148.566
İSKENDERUN BDC	-	-	-	-	-	-
MERSİN BDC	406	1.353	12.263	11.702	42.710	66.675
REGIONAL TOTAL	796	3.410	45.780	37.473	131.988	215.241
DIYARBAKIR BDC	838	895	-	30.610	20.350	50.960
MARDİN BDC	218	283	-	8.349	6.500	14.849
SİİRT BDC	250	-	470	7.076	-	7.546
BATMAN BDC	483	-	76	13.968	-	14.044
REGIONAL TOTAL	1.789	1.178	546	60.003	26.850	87.399
ÇAPA BDC	2.499	101	44.579	126.131	3.167	173.877
BAŞAKŞEHİR BDC	2.590	-	-	138.665	-	138.665
EDİRNE BDC	469	-	2.808	12.875	-	15.683
LÜLEBURGAZ BDC	208	-	1.634	8.463	-	10.097
ÇORLU BDC	576	-	4.082	29.031	-	33.113
REGIONAL TOTAL	6.342	101	53.103	315.165	3.167	371.435
SÜMER GÜNAY BDC	572	1.031	-	27.495	59.844	87.339
Z.KAMİL BDC	1.491	101	3.973	72.103	2.559	78.635
ÇEKMEKÖY BDC	640	349	-	22.133	10.463	32.596
REGIONAL TOTAL	2.703	1.481	3.973	121.731	72.866	198.570
DÜZCE BDC	308	622	373	8.252	11.580	20.205
ZONGULDAK BDC	603	-	1.515	19.446	-	20.961
KARABUK BDC	313	-	2.345	13.149	-	15.494
SAKARYA BDC	399	365	4.641	12.398	19.462	36.501
İZMİT BDC	410	641	16.741	15.740	27.084	59.565
REGIONAL TOTAL	2.033	1.628	25.615	68.985	58.126	152.726
BURSA BDC	670	612	25.081	33.138	27.352	85.571
BALIKESİR BDC	485	327	2.779	22.718	10.253	35.750
ÇANAKKALE BDC	326	-	6.771	18.357	-	25.128
YALOVA BDC	277	118	-	11.672	2.344	14.016
REGIONAL TOTAL	1.758	1.057	34.631	85.885	39.949	160.465
İZMİR BDC	2.133	474	24.961	101.129	14.645	140.735
AYDIN BDC	771	372	-	24.008	16.065	40.073
MANİSA BDC	740	389	3.728	46.977	12.143	62.848
ÖDEMiŞ BDC	334	-	5.573	11.982	-	17.555
REGIONAL TOTAL	3.978	1.235	34.262	184.096	42.853	261.211
DENİZLİ BDC	888	404	4.401	27.867	9.815	42.083
UŞAK BDC	464	245	-	13.784	3.358	17.142
MARMARİS BDC	839	591	4.089	21.106	12.123	37.318
REGIONAL TOTAL	2.191	1.240	8.490	62.757	25.296	96.543
ANTALYA BDC	717	939	12.747	38.221	48.808	99.776
İSPARTA BDC	187	309	3.129	15.203	14.182	32.514
BURDUR BDC	217	-	2.814	8.655	-	11.469
REGIONAL TOTAL	1.121	1.248	18.690	62.079	62.990	143.759
ERZURUM BDC	626	305	64	20.230	5.178	25.472
ERZİNCAN BDC	243	-	2.227	13.294	-	15.521
KARS BDC	216	-	3.909	9.180	-	13.089
AĞRI BDC	193	-	4.304	8.351	-	12.655
REGIONAL TOTAL	1.278	305	10.504	51.055	5.178	66.737
VAN BDC	852	-	164	48.456	-	48.620
MUŞ BDC	254	-	130	7.295	-	7.425
REGIONAL TOTAL	1.106	-	294	55.751	-	56.045
TRABZON BDC	578	363	860	18.559	12.850	32.269
RİZE BDC	293	358	-	7.010	6.639	13.649
ARTVİN BDC	206	-	-	5.160	-	5.160
GÜMÜŞHANE BDC	264	-	5	6.924	-	6.929
GİRESUN BDC	581	-	-	16.160	-	16.160
REGIONAL TOTAL	1.922	721	865	53.813	19.489	74.167
SAMSUN BDC	675	1.090	448	32.228	20.770	53.446
ORDU BDC	333	360	-	15.384	12.758	28.142
TOKAT BDC	607	-	93	19.137	-	19.230
AMASYA BDC	255	-	202	10.153	-	10.355
REGIONAL TOTAL	1.870	1.450	743	76.902	33.528	111.173
GRAND TOTAL	41.263	21.374	296.529	1.740.091	742.691	2.779.311

BLOOD COMPONENTS MADE AVAILABLE IN 2024						
	APHERESIS PLATELET	ERYTHROCYTE SUSPENSION	FRESH FROZEN PLASMA	POOLED PLATELET	CRYO	TOTAL
CENTRAL ANATOLIA RBC (ANKARA)	15.653	323.156	137.753	52.117	21.578	550.257
WEST ANATOLIA RBC (ESKİŞEHİR)	149	78.552	26.947	7.648	2.707	116.003
INLAND ANATOLIA RBC (KAYSERİ)	1	96.430	31.071	10.274	3.010	140.786
EAST MEDITERRANEAN RBC (GAZİANTEP)	356	164.375	71.961	18.387	2.050	257.129
SOUTHWEST ANATOLIA RBC (MALATYA)	0	62.756	39.961	8.839	1.335	112.891
CENTRAL MEDITERRANEAN RBC (ADANA)	9.498	221.616	90.070	30.374	3.426	354.984
SOUTH ANATOLIAN RBC (DİYARBAKIR)	0	83.610	33.343	8.974	903	126.830
EUROPEAN RBC	17.336	358.422	173.264	63.482	21.999	634.503
NORTH MARMARA RBC	13.206	206.259	89.745	31.340	9.797	350.347
WEST BLACK SEA RBC (DÜZCE)	1.692	148.766	56.582	18.375	1.547	226.962
SOUTH MARMARA RBC (BURSA)	768	158.916	65.413	19.818	6.745	251.660
AEGEAN RBC (İZMİR)	9.942	248.742	85.428	26.884	6.425	377.421
SOUTH AEGEAN RBC (DENİZLİ)	6.458	89.546	26.016	5.772	2.991	130.783
WEST MEDITERRANEAN RBC (ANTALYA)	521	139.429	61.671	19.100	1.500	222.221
EAST ANATOLIA RBC (ERZURUM)	0	45.705	34.070	4.000	278	84.053
SOUTHEAST RBC (VAN)	15	34.035	13.457	3.699	275	51.481
EAST BLACK SEA RBC (TRABZON)	2.103	71.808	21.725	8.274	635	104.545
CENTRAL BLACK SEA RBC (SAMSUN)	685	107.974	22.969	8.331	1.505	141.464
GRAND TOTAL	78.383	2.640.097	1.081.446	345.688	88.706	4.234.320

NUMBER OF DENIALS AND THEIR PERCENT IN TOTAL APPLICATIONS									
	2022			2023			2024		
	Total Application	Number of Denial Reason	Denial Percent	Total Application	Number of Denial Reason	Denial Percent	Total Application	Number of Denial Reason	Denial Percent
ANKARA BDC	183.789	30.554	17%	187.686	35.661	19%	182.024	39.882	22%
BATI BDC	62.446	10.174	16%	91.890	18.588	20%	106.748	26.235	25%
KONYA BDC	106.144	19.889	19%	103.565	20.800	20%	100.244	21.892	22%
ÇORUM BDC	21.027	3.118	15%	19.403	3.891	20%	17.186	3.662	21%
KASTAMONU BDC	11.000	1.175	11%	12.846	1.612	13%	15.396	1.493	10%
REGIONAL TOTAL	384.406	64.910	17%	415.390	80.552	19%	421.598	93.164	22%
ESKİŞEHİR BDC	46.657	6.537	14%	42.969	6.368	15%	45.623	8.831	19%
KÜTAHYA BDC	29.735	4.596	15%	29.646	4.231	14%	30.342	4.802	16%
AFYON BDC	19.250	2.321	12%	23.704	2.032	9%	22.840	2.836	12%
REGIONAL TOTAL	95.642	13.454	14%	96.319	12.631	13%	98.805	16.469	17%
KAYSERİ BDC	93.172	7.011	8%	93.505	6.977	7%	90.679	8.395	9%
SİVAS BDC	26.361	4.388	17%	23.456	3.968	17%	20.144	2.875	14%
NEVŞEHİR BDC	9.672	788	8%	10.793	958	9%	11.047	1.026	9%
KIRŞEHİR BDC	8.898	1.190	13%	5.378	657	12%	8.781	1.720	20%
YOZGAT BDC	13.616	1.171	9%	14.696	1.128	8%	11.656	714	6%
REGIONAL TOTAL	151.719	14.548	10%	147.828	13.688	9%	142.307	14.730	10%
GAZİANTEP BDC	116.624	17.031	15%	109.166	18.107	17%	130.158	24.168	19%
KİLİS BDC	8.711	841	10%	6.610	950	14%	7.398	1.124	15%
ŞANLIURFA BDC	66.655	7.970	12%	72.855	10.614	15%	67.777	10.399	15%
K.MARAŞ BDC	41.121	4.353	11%	10.946	1.622	15%	26.427	5.724	22%
REGIONAL TOTAL	233.111	30.195	13%	199.577	31.293	16%	231.760	41.415	18%
MALATYA BDC	43.448	2.904	7%	17.844	1.661	9%	26.738	2.806	10%
ELAZIĞ BDC	25.653	2.438	10%	20.160	1.984	10%	23.618	2.678	11%
ADIYAMAN BDC	21.332	2.468	12%	6.724	822	12%	12.223	1.947	16%
REGIONAL TOTAL	90.433	7.810	9%	44.728	4.467	10%	62.579	7.431	12%
ADANA BDC	128.182	19.564	15%	150.630	24.895	17%	183.488	34.922	19%
İSKENDERUN BDC	70.375	14.185	20%	8.788	2.135	24%	1	1	100%
MERSİN BDC	82.532	14.637	18%	89.569	17.279	19%	88.677	22.002	25%
REGIONAL TOTAL	281.089	48.386	17%	248.987	44.309	18%	272.166	56.925	21%
DIYARBAKIR BDC	59.345	4.946	8%	61.522	7.358	12%	60.850	9.890	16%
MARDİN BDC	15.977	1.421	9%	17.369	2.631	15%	17.043	2.194	13%
SİİRT BDC	7.431	716	10%	8.156	1.172	14%	9.461	1.915	20%
BATMAN BDC	15.776	1.761	11%	14.840	2.019	14%	16.423	2.379	14%
REGIONAL TOTAL	98.529	8.844	9%	101.887	13.180	13%	103.777	16.378	16%
ÇAPA BDC	167.531	24.260	14%	182.862	40.605	22%	203.269	29.392	14%
BAŞAKŞEHİR BDC	147.106	19.998	14%	114.682	18.209	16%	152.052	13.387	9%
EDİRNE BDC	25.160	3.817	15%	17.039	3.077	18%	18.589	2.906	16%
LÜLEBURGAZ BDC	15.494	1.713	11%	11.485	1.554	14%	11.657	1.560	13%
ÇORLU BDC	38.047	4.741	12%	38.760	5.764	15%	37.067	3.954	11%
REGIONAL TOTAL	393.338	54.529	14%	364.828	69.209	19%	422.634	51.199	12%
SÜMER GÜNAY BDC	102.046	11.356	11%	105.840	13.463	13%	99.601	12.262	12%
Z.KAMİL BDC	82.964	6.506	8%	89.467	7.529	8%	85.002	6.367	7%
ÇEKMEKÖY BDC	39.800	5.457	14%	39.914	5.060	13%	36.929	4.333	12%
REGIONAL TOTAL	224.810	23.319	10%	235.221	26.052	11%	221.532	22.962	10%
DUZCE BDC	24.674	3.695	15%	27.573	4.298	16%	26.172	5.967	23%
ZONGULDAK BDC	23.012	2.584	11%	23.502	2.872	12%	24.438	3.477	14%
KARABUK BDC	15.528	2.357	15%	16.655	2.712	16%	18.643	3.149	17%
SAKARYA BDC	41.667	6.629	16%	42.950	5.822	14%	43.972	7.471	17%
İZMİT BDC	65.536	10.458	16%	69.033	11.356	16%	72.278	12.713	18%
REGIONAL TOTAL	170.417	25.723	15%	179.713	27.060	15%	185.503	32.777	18%
BURSA BDC	109.328	20.649	19%	108.174	20.384	19%	105.345	19.774	19%
BALIKESİR BDC	45.406	8.018	18%	47.339	9.174	19%	44.147	8.397	19%
ÇANAKKALE BDC	27.799	3.916	14%	31.754	4.612	15%	28.917	3.789	13%
YALOVA BDC	15.233	1.580	10%	15.355	1.307	9%	15.543	1.527	10%
REGIONAL TOTAL	197.766	34.163	17%	202.622	35.477	18%	193.952	33.487	17%
İZMİR BDC	167.171	25.535	15%	158.378	30.305	19%	170.525	29.790	17%
AYDIN BDC	49.151	8.171	17%	53.714	13.156	24%	51.686	11.613	22%
MANİSA BDC	84.755	15.947	19%	84.962	18.006	21%	79.574	16.726	21%
ÖDEMiŞ BDC	19.157	2.717	14%	20.618	3.413	17%	21.373	3.818	18%
REGIONAL TOTAL	320.234	52.370	16%	317.672	64.880	20%	323.158	61.947	19%
DENİZLİ BDC	53.766	10.741	20%	54.271	11.566	21%	55.513	13.430	24%
UŞAK BDC	22.737	3.477	15%	18.102	2.257	12%	19.368	2.226	11%
MARMARİS BDC	44.052	7.603	17%	44.056	8.675	20%	47.485	10.167	21%
REGIONAL TOTAL	120.555	21.821	18%	116.429	22.498	19%	122.366	25.823	21%
ANTALYA BDC	122.501	26.742	22%	123.839	26.127	21%	130.510	30.734	24%
İSPARTA BDC	29.754	4.937	17%	29.635	4.605	16%	38.327	5.813	15%
BURDUR BDC	12.365	2.057	17%	13.143	1.710	13%	14.110	2.641	19%
REGIONAL TOTAL	164.620	33.736	20%	166.617	32.442	19%	182.947	39.188	21%
ERZURUM BDC	48.071	5.491	11%	33.385	4.253	13%	29.238	3.766	13%
ERZİNCAN BDC	19.314	3.168	16%	18.234	2.540	14%	17.811	2.290	13%
KARS BDC	15.274	1.481	10%	14.754	1.709	12%	15.126	2.037	13%
AĞRI BDC*				15.529	1.522	10%	13.925	1.270	9%
REGIONAL TOTAL	82.659	10.140	12%	81.902	10.024	12%	76.100	9.363	12%
VAN BDC	57.133	7.554	13%	57.535	8.222	14%	59.179	10.559	18%
MUŞ BDC	11.650	947	8%	11.106	1.149	10%	8.945	1.520	17%
REGIONAL TOTAL	68.783	8.501	12%	68.641	9.371	14%	68.124	12.079	18%
TRABZON BDC	34.312	3.885	11%	35.360	4.428	13%	37.025	4.756	13%
RİZE BDC	14.372	1.544	11%	15.577	1.532	10%	15.418	1.769	11%
ARTVİN BDC	5.615	625	11%	5.663	738	13%	6.369	1.209	19%
GÜMÜŞHANE BDC	6.806	611	9%	7.493	769	10%	8.035	1.106	14%
GİRESUN BDC	15.100	1.455	10%	17.468	2.370	14%	18.344	2.184	12%
REGIONAL TOTAL	76.205	8.120	11%	81.561	9.837	12%	85.191	11.024	13%
SAMSUN BDC	67.533	9.531	14%	66.262	12.136	18%	66.958	13.512	20%
ORDU BDC	27.946	3.720	13%	33.337	5.361	16%	33.243	5.101	15%
TOKAT BDC	26.193	2.248	9%	26.512	4.725	18%	25.304	6.074	24%
AMASYA BDC*	11.533	1.688	15%	9.803	2.269	23%	12.829	2.474	19%
REGIONAL TOTAL	133.205	17.187	13%	135.914	24.491	18%	138.334	27.161	20%
GRAND TOTAL	3.287.521	477.756	14,5%	3.205.836	531.461	16,6%	3.352.833	573.522	17,1%

ERYTHROCYTE SUSPENSION DISPOSAL REASONS															
	2022					2023					2024				
	Positive Test Result	Expiration	Low Volume	Other	Total	Positive Test Result	Expiration	Low Volume	Other	Total	Positive Test Result	Expiration	Low Volume	Other	Total
ANKARA BDC	882	0	303	1.069	2.254	754	0	283	1.196	2.213	665	0	303	1.764	2.732
BATI BDC	303	0	64	454	821	384	0	105	622	1.111	443	0	120	1.079	1.642
KONYA BDC	375	0	73	752	1.200	295	0	96	721	1.112	288	0	144	1.110	1.542
ÇORUM BDC	52	0	1	151	204	50	0	3	144	197	28	0	7	171	206
KASTAMONU BDC	20	0	1	100	121	14	0	1	111	126	45	0	5	145	195
REGIONAL TOTAL	1.632	0	442	2.526	4.600	1.497	0	468	2.794	4.759	1.469	0	579	4.269	6.317
ESKİŞEHİR BDC	216	0	3	383	602	162	0	0	400	562	155	0	0	665	820
KÜTAHYA BDC	134	0		249	383	116	0	0	251	367	110	0	0	395	505
AFYON BDC	89	0	1	186	276	98	0	0	245	343	115	0	0	320	435
REGIONAL TOTAL	439	0	4	618	1.261	376	0	0	896	1.272	380	0	0	1.380	1.760
KAYSERİ BDC	331	0	233	754	1.318	310	0	128	806	1.244	320	0	32	1.340	1.692
SİVAS BDC	104	0	6	221	331	51	0	4	219	274	61	0	5	350	416
NEVŞEHİR BDC	42	0		150	192	72	0	4	144	220	46	0	0	233	279
KIRŞEHİR BDC	41	0		115	156	10	0	1	90	101	13	0	1	141	155
YOZGAT BDC	30	0	3	122	155	23	0	1	152	176	30	0	0	200	230
REGIONAL TOTAL	548	0	242	1.362	2.152	466	0	138	1.411	2.015	470	0	38	2.264	2.772
GAZİANTEP BDC	938	0	101	885	1.924	812	0	82	826	1.720	972	0	24	1.644	2.640
KİLİS BDC	69	0	14	136	219	48	0	7	77	132	33	0	5	170	208
ŞANLIURFA BDC	618	1	19	524	1.162	577	0	20	545	1.142	512	0	10	968	1.430
K.MARAŞ BDC	208	0	8	347	563	42	0	7	109	158	110	0	1	418	529
REGIONAL TOTAL	1.833	1	142	1.892	3.968	1.479	0	116	1.557	3.152	1.627	0	40	3.140	4.807
MALATYA BDC	269	0		355	624	86	0	0	186	272	103	0	0	423	526
ELAZIĞ BDC	193	0		252	445	154	0	1	184	339	129	0	1	409	539
ADIYAMAN BDC	157	0		197	354	38	0	0	52	90	67	0	0	194	261
REGIONAL TOTAL	619	0	0	804	1.423	278	0	1	422	701	299	0	1	1.026	1.326
ADANA BDC	689	0	1	1.324	2.014	505	0	0	1.645	2.150	639	0	0	3.191	3.830
İSKENDERUN BDC	176	0	1	1.127	1.304	25	0	0	129	154	0	0	0	0	0
MERSİN BDC	255	0	5	894	1.154	140	0	1	956	1.097	175	0	0	1.190	1.365
REGIONAL TOTAL	1.120	0	7	3.345	4.472	670	0	1	2.730	3.401	814	0	0	4.533	5.195
DIYARBAKIR BDC	617	0		545	1.162	499	0	0	608	1.107	597	1	0	900	1.498
MARDİN BDC	144	0		196	340	111	0	0	177	288	125	0	0	328	453
İLİRT BDC	45	0		98	143	30	0	0	88	118	47	0	0	142	189
BATMAN BDC	115	0		185	300	97	0	0	136	233	133	0	0	237	370
REGIONAL TOTAL	921	0	0	1.024	1.945	737	0	0	1.009	1.746	902	1	0	1.607	2.510
ÇAPA BDC	1.322	0	268	901	2.491	1.035	0	49	1.075	2.159	1.452	0	28	1.591	3.071
BAŞAKŞEHİR BDC	1.317	0	269	960	2.546	823	0	53	808	1.684	1.240	0	36	1.264	2.540
EDİRNE BDC	142	0	24	196	362	58	0	4	138	200	106	0	2	179	287
LÜLEBURGAZ BDC	98	0	9	157	264	58	0	3	131	192	67	0	0	133	260
CORLU BDC	202	0	52	240	494	284	0	18	320	622	257	0	7	346	610
REGIONAL TOTAL	3.081	0	622	2.454	6.157	2.258	0	127	2.472	4.857	3.122	0	73	3.513	6.708
SÜMER GÜNAY BDC	634	0	26	571	1.231	592	0	21	686	1.299	483	0	9	679	1.171
Z.KAMİL BDC	598	0	48	508	1.154	534	0	18	657	1.209	510	0	5	690	1.205
ÇEKMEKÖY BDC	237	0	9	290	536	224	0	8	352	584	180	0	5	365	550
REGIONAL TOTAL	1.469	0	83	1.369	2.921	1.350	0	47	1.695	3.092	1.173	0	19	1.734	2.926
DÜZCE BDC	110	0		166	276	135	0	6	235	376	128	0	3	212	343
ZONGULDAK BDC	118	0		166	284	103	0	0	174	277	118	0	0	213	331
KARABUK BDC	71	0		150	221	59	0	1	131	191	61	0	1	166	228
SAKARYA BDC	236	0	7	248	491	280	0	12	359	651	250	0	1	425	676
İZMİT BDC	421	0	5	343	769	332	0	10	431	773	361	0	5	467	833
REGIONAL TOTAL	956	0	12	1.073	2.041	909	0	29	1.330	2.268	918	0	10	1.483	2.411
BURSA BDC	666	0		605	1.271	581	0	0	680	1.261	531	0	0	681	1.212
BALIKESİR BDC	172	0		252	424	144	0	0	367	511	142	0	0	295	437
ÇANAKKALE BDC	170	0		175	345	182	0	0	204	386	152	0	0	239	391
YALOVA BDC	113	0		125	238	112	0	0	173	285	89	0	0	168	257
REGIONAL TOTAL	1.121	0	0	1.157	2.278	1.019	0	0	1.424	2.443	814	0	0	1.533	2.237
İZMİR BDC	887	0	9	1.311	2.207	817	0	2	1.233	2.052	936	0	7	2.377	3.320
AYDIN BDC	261	0	3	462	726	239	0	0	493	732	238	0	0	758	996
MANİSA BDC	363	0		536	899	362	0	1	608	971	314	0	0	981	1.295
ÖDEMiŞ BDC	68	0		171	239	90	0	0	164	254	76	0	0	301	377
REGIONAL TOTAL	1.579	0	12	2.480	4.071	1.508	0	3	2.498	4.009	1.564	0	7	4.417	5.988
DENİZLİ BDC	196	0		358	554	165	0	0	414	579	168	0	0	588	756
UŞAK BDC	87	0		213	300	60	0	1	196	257	63	0	0	267	330
MARMARİS BDC	221	0		327	548	165	0	0	322	487	202	0	0	537	739
REGIONAL TOTAL	504	0	0	893	1.402	390	0	1	522	833	433	0	0	839	1.233
ANTALYA BDC	813	0	1	670	1.484	784	0	3	883	1.670	731	0	1	901	1.633
İSPARTA BDC	131	0		188	319	110	0	0	242	352	158	0	0	289	447
BURDUR BDC	46	0		101	147	33	0	0	121	154	40	0	0	163	203
REGIONAL TOTAL	990	0	1	959	1.950	927	0	3	1.246	2.176	929	0	1	1.353	2.283
ERZURUM BDC	103	0		191	294	137	0	0	247	384	120	0	0	391	511
ERZİNCAN BDC	289	0		389	678	74	0	0	160	234	48	0	1	221	270
KARS BDC	71	0		152	223	71	0	0	154	225	61	0	0	204	265
AGRI BDC*					141	0	0	0	154	295	117	0	0	191	308
REGIONAL TOTAL	463	0	0	732	1.195	423	0	0	715	1.138	245	0	1	1.007	1.354
VAN BDC	360	0	1	533	894	278	0	1	548	827	267	0	0	859	1.125
MUŞ BDC	118	0	2	154	274	93	0	0	146	239	80	0	0	165	245
REGIONAL TOTAL	478	0	3	687	1.168	371	0	1	694	1.066	347	0	0	1.023	1.370
TRABZON BDC	120	0	38	193	351	119	0	2	286	347	156	0	2	351	509
RİZE BDC	62	0	16	109	187	93	0	3	156	252	79	0	0	219	298
ARTVİN BDC	38	0		91	129	40	0	0	78	118	26	0	0	116	142
GÜMÜŞHANE BDC	31	0	1	87	119	34	0	1	97	132	22	0	0	154	176
GİRESUN BDC	80	0	20	114	214	75	0	5	133	213	76	0	4	213	293
REGIONAL TOTAL	351	0	75	504	1.000	310	0	11	600	1.052	359	0	0	455	735
SAMSUN BDC	353	0		339	692	310	0	8	346	664	258	0	22	455	735
ORDU BDC	160	0	1	182	343	175	0	0	234	419	178	0	12	273	463
TOKAT BDC	172	0	1	196	369	119	0	2	205	326	105	0	2	218	325
AMASYA BDC	47	0		87	134	36	0	1	92	129	44	0	0	134	178
REGIONAL TOTAL	732	0	2	804	1.538	640	0	21	877	1.538	585	0	36	1.080	1.701
GRAND TOTAL	18.816	1	1.647	24.978	45.442	15.659	0	967	25.392	42.018	16.651	1	811	37.505	54.968
AGRI BDC* opened in January 2023.															

FRESH FROZEN PLASMA DISPOSAL REASONS

	2022					2023					2024				
	Positive Test Result	Expiration	Lipid Content	Other	Total	Positive Test Result	Expiration	Lipid Content	Other	Total	Positive Test Result	Expiration	Lipid Content	Other	Total
ANKARA BDC	246	0	0	2.215	2.461	155	0	1	804	960	150	0	3	569	722
BATI BDC	81	0	2	413	496	65	0	1	337	403	67	0	1	295	363
KONYA BDC	91	0	2	329	422	70	0	2	437	509	60	0	1	341	402
ÇORUM BDC	12	0	0	229	241	12	0	0	166	178	6	0	0	166	172
KASTAMONU BDC	4	0	0	120	124	2	0	0	115	117	11	0	0	133	144
REGIONAL TOTAL	434	0	4	3.303	3.741	300	0	4	1.859	2.157	294	0	5	1.504	1.803
ESKİŞEHİR BDC	38	0	21	102	161	32	0	16	122	170	41	0	10	217	269
KÜTAHYA BDC	27	0	22	89	138	27	0	9	94	130	22	0	9	183	214
AFYON BDC	23	0	48	77	148	30	0	66	91	187	23	0	13	123	159
REGIONAL TOTAL	88	0	91	268	447	89	0	91	307	487	86	0	32	523	641
KAYSERİ BDC	44	0	1	159	204	45	0	6	983	1.034	43	0	3	249	295
SİVAS BDC	13	0	0	72	85	6	0	1	194	201	3	0	3	80	86
NEVŞEHİR BDC	5	0	0	67	72	3	0	0	207	210	4	0	4	87	95
KIRŞEHİR BDC	6	0	0	57	63	0	0	0	85	85	2	0	5	73	80
YOZGAT BDC	6	0	0	67	73	1	0	0	93	94	3	1	0	5	84
REGIONAL TOTAL	74	0	1	422	497	55	0	7	1.562	1.624	55	0	20	573	648
GAZİANTEP BDC	156	0	5	276	437	131	0	1	249	381	152	0	0	441	593
KİLİS BDC	5	0	0	69	74	7	0	0	46	53	5	0	0	73	78
ŞANLIURFA BDC	123	0	3	193	319	87	0	1	188	276	72	0	0	259	331
K.MARAŞ BDC	52	0	1	151	204	9	0	0	46	55	14	0	0	150	164
REGIONAL TOTAL	336	0	9	689	1.034	234	0	2	529	765	243	0	0	923	1.166
MALATYA BDC	73	0	7	173	253	23	0	0	92	115	29	0	1	169	199
ELAZIĞ BDC	44	0	1	129	174	29	0	5	76	110	23	0	0	136	159
ADİYAMAN BDC	33	0	4	123	160	8	0	0	22	30	14	8	0	99	113
REGIONAL TOTAL	150	0	12	425	587	60	0	5	190	255	66	0	1	404	471
ADANA BDC	67	0	2	301	370	20	0	9	310	339	45	0	32	552	629
İSKENDERUN BDC	20	0	2	133	155	5	0	0	20	25	0	0	0	0	0
MERSİN BDC	31	0	6	170	207	7	0	7	149	163	17	0	2	228	247
REGIONAL TOTAL	118	0	10	604	732	32	0	16	479	527	62	0	34	780	876
DIYARBAKIR BDC	159	0	4	205	368	113	0	3	244	360	71	0	0	353	424
MARDİN BDC	27	0	1	79	107	20	0	1	87	108	29	0	0	134	163
SİRT BDC	12	0	0	55	67	9	0	1	49	59	5	0	0	71	76
BATMAN BDC	33	0	0	92	125	20	0	5	69	94	45	0	0	139	184
REGIONAL TOTAL	231	0	5	431	667	162	0	10	449	621	150	0	0	697	847
ÇAĞA BDC	304	0	38	4.945	5.287	232	0	23	2.368	2.623	238	0	20	376	634
BAŞAŞKŞEHİR BDC	291	0	38	4.431	4.760	169	0	15	1.688	1.872	243	0	21	323	587
EDİRNE BDC	70	0	8	552	630	30	0	1	310	341	39	0	1	87	127
LÜLEBURGAZ BDC	40	0	5	480	525	28	0	2	226	256	30	0	0	81	111
ÇORLU BDC	67	0	10	902	979	84	0	5	514	603	55	0	2	108	165
REGIONAL TOTAL	772	0	99	11.310	12.181	543	0	46	5.106	5.695	605	0	44	975	1.624
SAMSUN BDC	166	0	9	159	175	130	0	10	209	349	109	0	2	199	309
Z.KAMİL BDC	139	0	9	179	327	86	0	9	190	285	92	0	2	206	300
ÇEKMEKÖY BDC	55	0	3	128	186	54	0	3	136	193	44	0	0	132	176
REGIONAL TOTAL	380	0	21	112	513	270	0	22	535	827	244	0	4	537	785
DÜZCE BDC	17	0	12	101	130	32	0	8	161	201	24	0	3	111	138
ZONGULDAK BDC	33	0	87	91	211	25	0	26	129	180	25	0	13	103	141
KARABUK BDC	15	0	61	81	157	9	0	13	102	124	12	0	28	79	119
SAKARYA BDC	56	0	31	148	235	46	0	8	278	332	35	0	5	165	205
İZMİT BDC	117	0	48	198	363	57	0	13	345	415	77	0	6	180	273
REGIONAL TOTAL	238	0	239	619	1.096	169	0	68	1.015	1.252	173	0	55	648	876
BURSA BDC	263	0	0	256	519	204	0	3	254	461	216	0	0	303	519
BALIKESİR BDC	57	0	0	108	165	43	0	1	159	203	64	0	0	154	218
ÇANAKKALE BDC	37	0	2	87	126	25	0	0	93	118	33	0	0	92	125
YALOVA BDC	29	0	0	58	87	25	0	0	76	101	32	0	0	85	117
REGIONAL TOTAL	386	0	2	509	897	297	0	4	582	883	345	0	0	634	979
İZMİR BDC	140	0	74	256	470	174	0	22	318	514	170	0	29	535	734
AYDIN BDC	34	0	9	111	154	51	0	9	145	205	51	0	13	202	266
MANİSA BDC	45	0	169	120	334	56	0	76	179	311	36	0	85	186	307
ÖDEMiŞ BDC	7	0	10	53	70	21	0	5	80	106	15	0	6	84	105
REGIONAL TOTAL	226	0	262	540	1.028	302	0	112	722	1.136	272	0	133	1.007	1.412
DENİZLİ BDC	74	0	0	179	253	41	0	4	188	233	59	0	3	260	322
UŞAK BDC	27	0	0	129	156	18	0	0	123	141	21	0	3	124	148
MARMARİS BDC	65	0	0	225	290	65	0	1	222	288	94	0	47	255	396
REGIONAL TOTAL	166	0	0	533	699	124	0	5	533	662	174	0	53	639	866
ANTALYA BDC	331	0	12	288	631	234	0	9	282	525	176	0	25	261	462
İSPARTA BDC	41	0	3	91	135	35	0	2	89	126	43	0	2	92	137
BURDUR BDC	28	0	1	69	98	16	0	3	81	100	12	0	1	90	103
REGIONAL TOTAL	400	0	16	448	864	286	0	14	452	751	231	0	28	443	702
ERZURUM BDC	62	0	2	138	202	27	0	7	87	121	23	0	2	163	188
ERZİNCAN BDC	16	0	0	83	99	23	0	0	68	91	8	0	1	88	97
KARS BDC	15	0	0	78	93	14	0	0	64	78	8	0	0	74	82
AĞRI BDC*						19	0	1	62	82	17	0	2	73	92
REGIONAL TOTAL	93	0	2	299	394	83	0	8	281	372	56	0	5	398	459
VAN BDC	69	0	2	457	528	69	0	4	179	252	58	0	0	300	358
MUŞ BDC	14	0	4	159	177	12	0	0	60	92	17	0	0	114	131
REGIONAL TOTAL	93	0	6	316	705	21	0	4	259	344	75	0	0	114	439
TRABZON BDC	33	0	14	96	143	23	0	17	120	160	27	0	16	133	176
RİZE BDC	16	0	10	59	85	18	0	11	87	116	19	0	6	88	113
ARTVİN BDC	10	0	0	51	61	12	0	8	53	73	11	0	2	56	69
GÜMÜŞHANE BDC	5	0	1	47	53	9	0	10	62	81	5	0	5	75	85
GİRESUN BDC	14	0	7	57	78	20	0	14	71	105	20	0	5	92	117
REGIONAL TOTAL	78	0	32	310	420	82	0	60	393	535	82	0	34	444	560
SAMSUN BDC	81	0	8	165	254	65	0	0	1.214	1.279	58	0	0	168	226
ORDU BDC	49	0	5	164	208	45	0	3	1.012	1.060	18	0	0	91	109
TOKAT BDC	32	0	1	112	145	24	0	0	499	523	18	0	0	87	105
AMASYA BDC	7	0	0	66	73	8	0	0	227	235	8	0	0	62	70
REGIONAL TOTAL	169	0	14	497	680	142	0	3	2.952	3.097	102	0	0	408	510
GRAND TOTAL	4.422	0	825	22.368	27.615	3.314	0	481	18.205	22.000	3.315	0	448	11.951	15.714

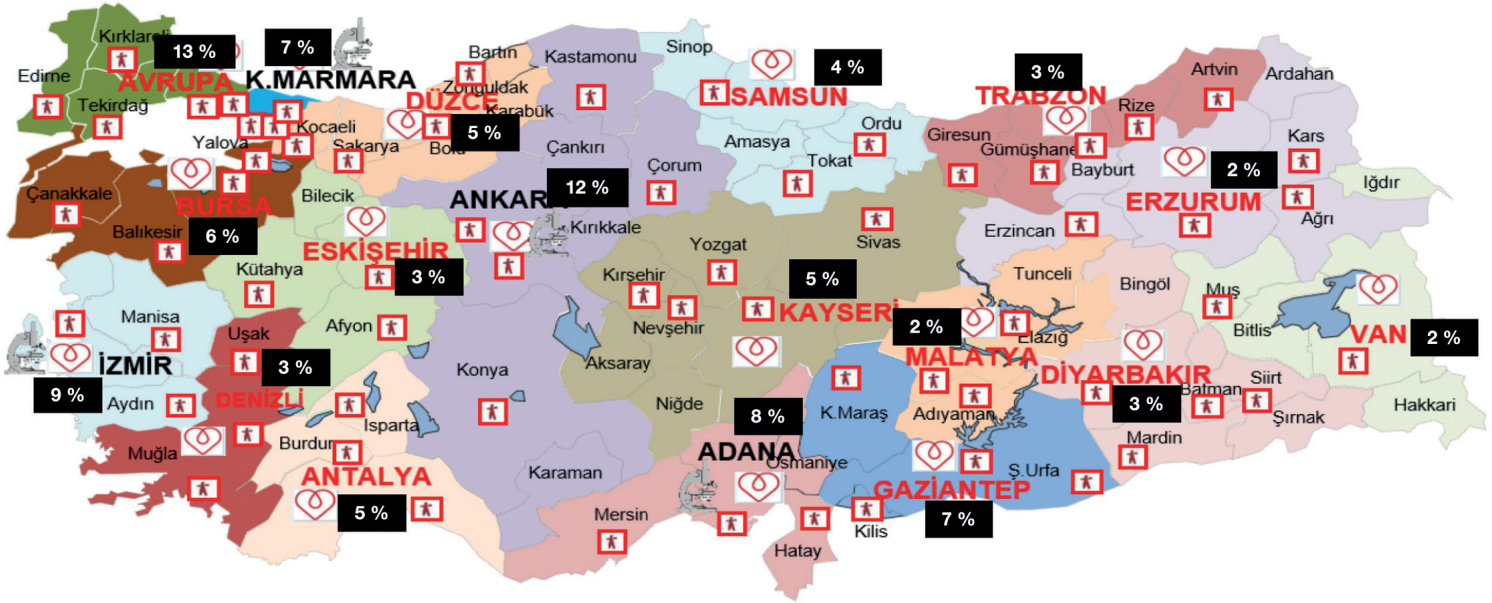
AĞRI BDC* opened in January 2023.

POOLED PLATELET DISPOSAL REASONS															
	2022					2023					2024				
	Expiration	Stem_Compon nt with	Sterile Tube Coalescer	OTHER	Total	Expiration	Stem_Compon nt with	Sterile Tube Coalescer	OTHER	Total	Expiration	Stem_Compon nt with	Sterile Tube Coalescer	OTHER	Total
ANKARA BDC	149	1	0	51	201	52	0	0	24	76	36	0	0	22	58
BATI BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KONYA BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÇORUM BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KASTAMONU BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	149	1	0	51	201	52	0	0	24	76	36	0	0	22	58
ESKİŞEHİR BDC	149	6	0	13	168	131	0	0	6	137	39	0	0	13	52
KÜTAHYA BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AFYON BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	149	6	0	13	168	131	0	0	6	137	39	0	0	13	52
KAYSERİ BDC	34	0	3	11	48	88	0	0	6	94	91	4	3	20	118
SİVAS BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NEVŞEHİR BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KIRŞEHİR BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YOZGAT BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	34	0	3	11	48	88	0	0	6	94	91	4	3	20	118
GAZİANTEP BDC	1.317	14	2	91	1.424	124	10	3	69	206	39	6	6	54	105
KİLİS BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ŞANLIURFA BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
K.MARAŞ BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	1.317	14	2	91	1.424	124	10	3	69	206	39	6	6	54	105
MALATYA BDC	100	0	0	12	112	83	0	0	0	83	69	1	0	1	71
ELAZIĞ BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ADIYAMAN BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	100	0	0	12	112	83	0	0	0	83	69	1	0	1	71
ADANA BDC	881	20	0	127	1.028	599	3	0	94	696	398	1	3	88	490
İSKENDERUN BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MERSİN BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	881	20	0	127	1.028	599	3	0	94	696	398	1	3	88	490
DIYARBAKIR BDC	108	0	0	2	110	86	0	0	8	94	56	0	0	6	62
MARDİN BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SİİRT BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BATMAN BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	108	0	0	2	110	86	0	0	8	94	56	0	0	6	62
ÇAPA BDC	32	14	0	40	86	48	13	0	18	79	14	23	0	11	48
BAŞAKŞEHİR BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EDİRNE BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
LÜLEBURGAZ BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÇORLU BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	32	14	0	40	86	48	13	0	18	79	14	23	0	11	48
SÜMER GÜNAY BDC	327	0	0	63	390	68	0	0	77	145	23	0	0	81	104
Z.KAMİL BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÇEKMEKÖY BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	327	0	0	63	390	68	0	0	77	145	23	0	0	81	104
DÜZCE BDC	242	27	0	34	303	239	4	0	40	283	23	0	0	30	53
ZONGULDAK BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KARABÜK BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SAKARYA BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
İZMİT BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	242	27	0	34	303	239	4	0	40	283	23	0	0	30	53
BURSA BDC	104	0	0	20	124	53	0	0	5	58	67	0	0	23	90
BALIKESİR BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÇANAKKALE BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
YALOVA BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	104	0	0	20	124	53	0	0	5	58	67	0	0	23	90
İZMİR BDC	201	35	0	17	253	142	19	0	6	167	71	26	0	22	119
AYDIN BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MANİSA BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ÖDEMiŞ BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	201	35	0	17	253	142	19	0	6	167	71	26	0	22	119
DENİZLİ BDC	108	1	1	12	122	25	0	1	18	44	6	0	1	8	15
UŞAK BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MARMARİS BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	108	1	1	12	122	25	0	1	18	44	6	0	1	8	15
ANTALYA BDC	35	0	2	23	60	68	1	7	23	99	130	2	0	26	158
İSPARTA BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BURDUR BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	35	0	2	23	60	68	1	7	23	99	130	2	0	26	158
ERZURUM BDC	693	0	0	10	703	646	0	0	0	646	270	0	0	2	272
ERZİNCAN BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
KARS BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AĞRI BDC*	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	693	0	0	10	703	646	0	0	0	646	270	0	0	2	272
VAN BDC	502	2	0	16	520	454	0	0	10	464	358	2	0	1	361
MUŞ BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	502	2	0	16	520	454	0	0	10	464	358	2	0	1	361
TRABZON BDC	55	1	1	8	65	47	0	0	2	49	56	0	0	26	82
RİZE BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ARTVİN BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GÜMÜŞHANE BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
GİRESUN BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	55	1	1	8	65	47	0	0	2	49	56	0	0	26	82
SAMSUN BDC	365	2	5	23	395	213	0	1	11	225	204	3	1	30	238
ORDU BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TOKAT BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
AMASYA BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	365	2	5	23	395	213	0	1	11	225	204	3	1	30	238
GRAND TOTAL	5.402	123	14	573	6.112	3.166	50	12	417	3.645	1.950	68	14	464	2.496
AĞRI BDC* opened in January 2023.															

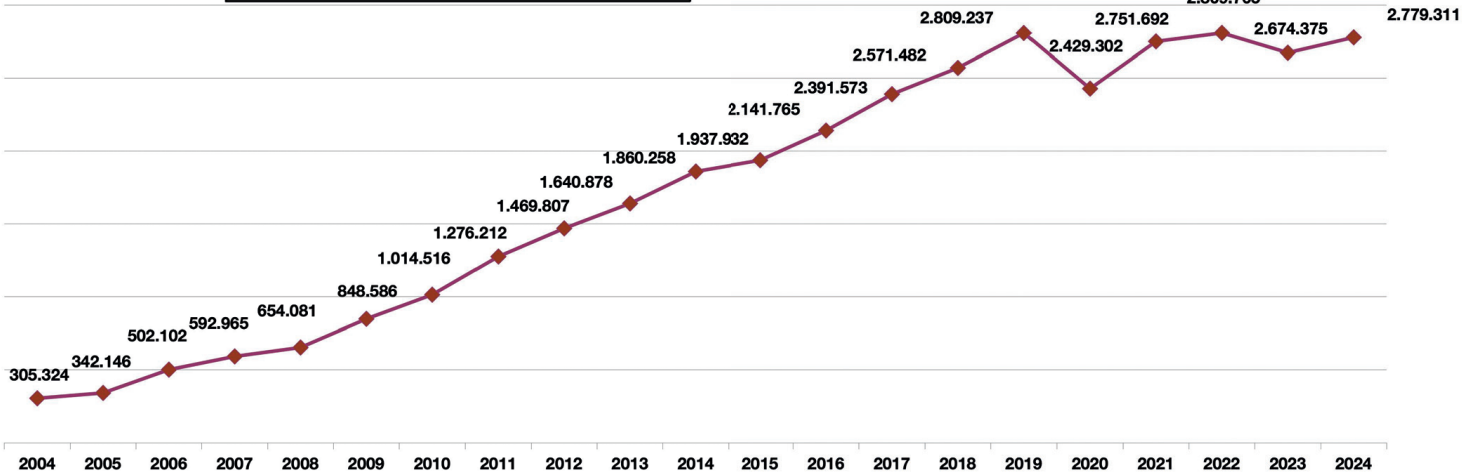
CRYO DISPOSAL REASONS

	2022					2023					2024				
	Positive Test Result	Low Volume	Lipid Content	Other	Total	Positive Test Result	Low Volume	Lipid Content	Other	Total	Positive Test Result	Low Volume	Lipid Content	Other	Total
ANKARA BDC	0	0	0	11	11	0	0	0	0	0	0	0	0	5	5
BATI BDC	0	0	0	2	2	0	0	0	0	0	0	0	0	1	1
KONYA BDC	0	0	0	3	3	1	0	0	38	39	0	0	0	5	5
ÇORUM BDC	0	0	0	50	50	0	0	0	45	45	0	0	0	48	48
KASTAMONU BDC	0	0	0	17	17	0	0	0	23	23	1	0	0	41	42
REGIONAL TOTAL	0	0	0	83	83	1	0	0	106	107	1	0	0	100	101
ESKİŞEHİR BDC	0	0	0	10	10	0	0	0	0	0	0	0	0	0	0
KÜTAHYA BDC	0	0	1	5	6	0	0	0	0	0	0	0	0	0	0
AFYON BDC	0	0	3	71	74	0	0	1	70	71	0	0	0	61	61
REGIONAL TOTAL	0	0	4	86	90	0	0	1	70	71	0	0	0	61	61
KAYSERİ BDC	0	0	0	7	7	0	0	0	0	0	0	0	0	0	0
SİVAS BDC	0	0	0	8	8	0	0	0	10	10	0	0	0	9	9
NEVŞEHİR BDC	0	0	0	9	9	0	0	0	27	27	0	0	0	21	21
KIRŞEHİR BDC	0	0	0	19	19	0	0	0	2	2	0	0	0	4	4
YOZGAT BDC	0	0	0	16	16	0	0	0	30	30	0	0	0	17	17
REGIONAL TOTAL	0	0	0	59	59	0	0	0	69	69	0	0	0	51	51
GAZİANTEP BDC	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
KİLİS BDC	0	0	0	3	3	0	0	0	0	0	0	0	0	0	0
ŞANLIURFA BDC	0	0	0	56	56	0	0	0	38	38	0	0	0	29	29
K.MARAŞ BDC	0	0	0	20	20	0	0	0	0	0	0	0	0	13	13
REGIONAL TOTAL	0	0	0	80	80	0	0	0	38	38	0	0	0	42	42
MALATYA BDC	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
ELAZIĞ BDC	0	0	0	12	12	0	0	0	0	0	0	0	0	0	0
ADIYAMAN BDC	0	0	0	15	15	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	0	0	0	29	29	0	0	0	0	0	0	0	0	0	0
ADANA BDC	0	0	0	65	65	0	0	0	4	4	0	0	1	16	17
İSKENDERUN BDC	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
MERSİN BDC	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	0	0	0	67	67	0	0	0	4	4	0	0	1	16	17
DIYARBAKIR BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MARDİN BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SİRT BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
BATMAN BDC	0	0	0	70	70	0	0	0	25	25	0	0	0	33	33
REGIONAL TOTAL	0	0	0	70	70	0	0	0	25	25	0	0	0	34	34
ÇAPA BDC	0	0	0	82	82	0	0	0	19	19	0	0	0	116	116
BAŞAKŞEHİR BDC	0	0	0	88	88	0	0	0	20	20	0	0	0	93	93
EDİRNE BDC	0	0	0	3	3	0	0	0	0	0	0	0	0	9	9
LÜLEBURGAZ BDC	0	0	0	0	0	0	0	0	1	1	0	1	0	4	5
ÇORLU BDC	0	0	0	3	3	0	0	0	1	1	0	1	0	22	23
REGIONAL TOTAL	0	0	0	176	176	0	0	0	41	41	0	2	0	244	246
SÜMER GÜNAY BDC	0	2	0	20	22	0	0	0	15	15	0	0	0	54	54
Z.KAMİL BDC	0	2	0	16	18	0	0	0	15	15	0	0	0	60	60
ÇEKMEKÖY BDC	0	0	0	14	14	0	0	0	7	7	0	0	0	23	23
REGIONAL TOTAL	0	4	0	50	54	0	0	0	37	37	0	0	0	137	137
DÜZCE BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ZONGULDAK BDC	0	0	2	29	31	0	0	2	44	46	0	0	0	38	38
KARABUK BDC	0	0	2	24	26	0	0	0	25	25	0	0	0	25	25
SAKARYA BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
İZMİT BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	0	0	4	53	57	0	0	2	69	71	0	0	0	63	63
BURSA BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
BALIKESİR BDC	0	0	0	10	10	0	0	0	29	29	0	0	1	60	61
ÇANAKKALE BDC	0	0	1	37	38	0	0	0	56	56	0	0	1	17	18
YALOVA BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	0	0	1	47	48	0	0	0	85	85	0	0	2	77	79
İZMİR BDC	0	0	0	20	20	0	0	0	0	0	0	0	0	0	0
AYDIN BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MANİSA BDC	0	0	23	100	123	0	0	5	32	37	0	0	22	44	66
ÖDEMiŞ BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	0	0	23	120	143	0	0	5	32	37	0	0	22	44	66
DENİZLİ BDC	0	0	0	7	7	0	0	0	3	3	0	0	0	3	3
UŞAK BDC	0	0	0	20	20	0	0	0	6	6	0	0	0	50	50
MARMARİS BDC	0	0	0	80	80	0	0	0	77	77	0	0	0	82	82
REGIONAL TOTAL	0	0	0	107	107	0	0	0	86	86	0	0	0	135	135
ANTALYA BDC	0	0	0	32	32	0	0	0	93	93	0	0	0	21	21
İSPARTA BDC	0	0	1	21	22	0	0	0	42	42	0	0	0	17	17
BURDUR BDC	0	0	0	28	28	0	0	0	12	12	0	0	0	14	14
REGIONAL TOTAL	0	0	1	81	82	0	0	0	147	147	0	0	0	52	52
ERZURUM BDC	0	0	0	40	40	0	0	0	0	0	0	0	0	6	6
ERZİNCAN BDC	0	0	0	21	21	0	0	0	0	0	0	0	0	4	4
KARŞ BDC	0	0	0	9	9	0	0	0	0	0	0	0	0	3	3
AĞRI BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	1	1
REGIONAL TOTAL	0	0	0	70	70	0	0	0	0	0	0	0	0	14	14
VAN BDC	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
MUŞ BDC	0	0	0	52	52	0	0	0	30	30	0	0	0	44	44
REGIONAL TOTAL	0	0	0	53	53	0	0	0	30	30	0	0	0	44	44
TRABZON BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
RİZE BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ARTVİN BDC	0	3	0	19	22	0	0	0	28	28	0	0	0	23	23
GÜMÜŞHANE BDC	0	6	0	48	54	0	2	0	52	54	0	0	0	48	48
GİRESUN BDC	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	0	9	0	67	76	0	2	0	80	82	0	0	0	71	71
SAMSUN BDC	0	0	0	64	64	0	0	0	72	72	0	0	0	85	85
ORDU BDC	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
TOKAT BDC	0	0	0	5	5	0	0	0	0	0	0	0	0	0	0
AMASYA BDC	0	0	0	2	2	0	0	0	0	0	0	0	0	0	0
REGIONAL TOTAL	0	0	0	76	76	0	0	0	72	72	0	0	0	85	85
GRAND TOTAL	0	13	33	1.374	1.420	1	2	8	991	1.002	1	2	25	1.270	1.298

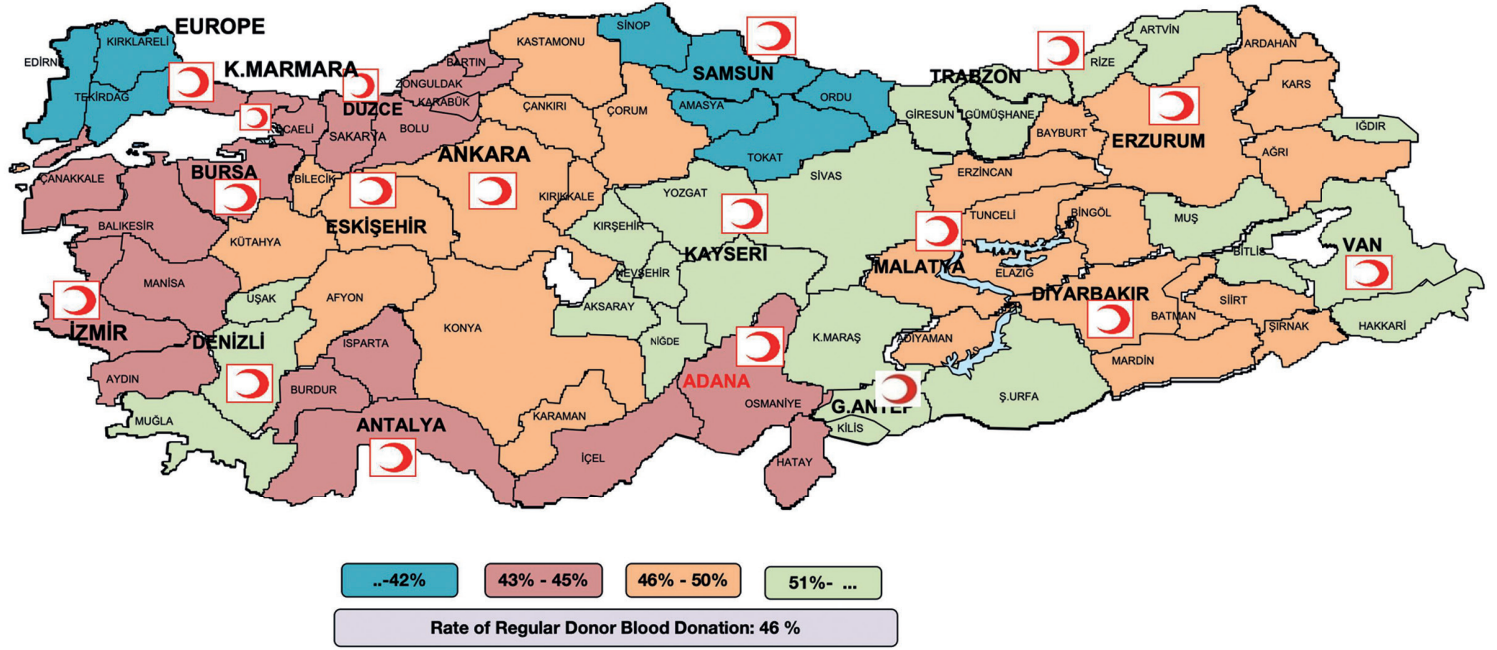
DISTRIBUTION OF BLOOD DONATIONS COLLECTED IN 2024 BY REGIONS



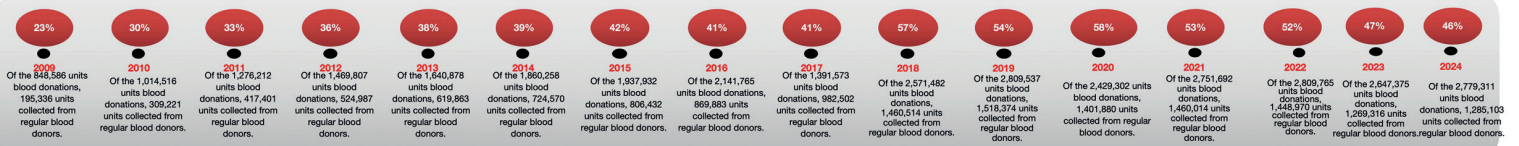
Year	Number of Blood Donations
2004	1200
2005	1350
2006	1500
2007	1650
2008	1800
2009	1950
2010	2100
2011	2250
2012	2400
2013	2550
2014	2700
2015	2850
2016	3000
2017	3150
2018	3300
2019	3450
2020	3600
2021	3750
2022	3900
2023	4050
2024	4200



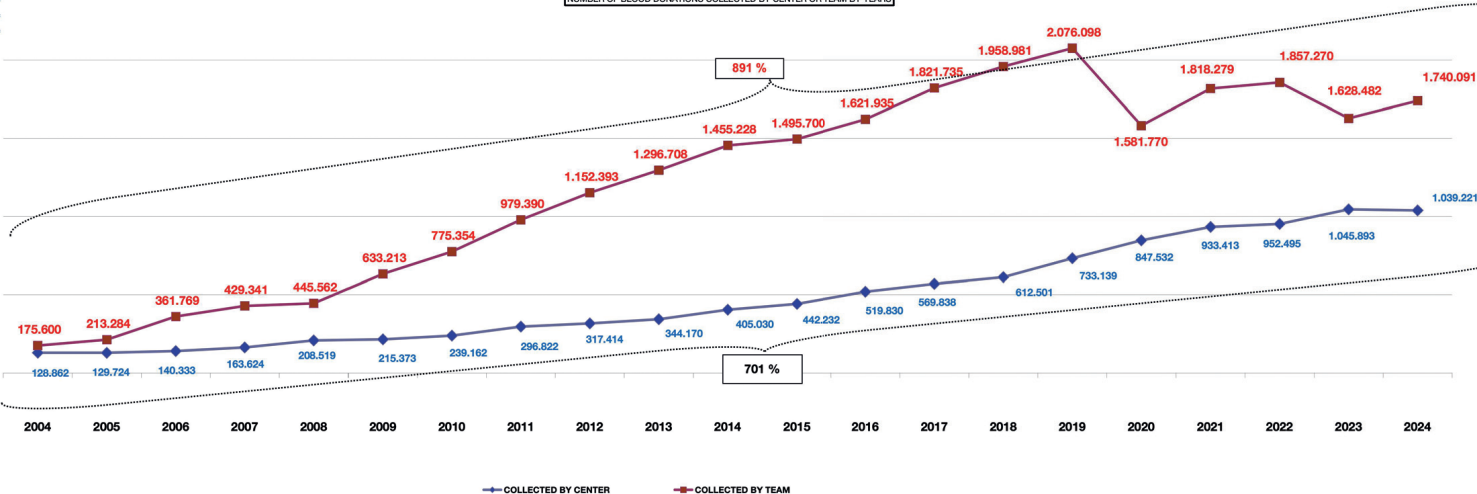
In 2007, collected 592,965 units blood from 464,406 persons
In 2008, collected 654,081 units blood from 571,195 persons
In 2009, collected 848,586 units blood from 730,139 persons
In 2010, collected 1,014,516 units blood from 890,609 persons
In 2011, collected 1,276,212 units blood from 1,045,849 persons
In 2012, collected 1,469,807 units blood from 1,189,980 persons
In 2013, collected 1,640,878 units blood from 1,343,149 persons
In 2014, collected 1,860,255 units blood from 1,507,814 persons
In 2015, collected 1,937,932 units blood from 1,580,917 persons
In 2016, collected 2,141,765 units blood from 1,741,590 persons
In 2017, collected 2,391,573 units blood from 1,931,805 persons
In 2018, collected 2,571,482 units blood from 2,064,340 persons
In 2019, collected 2,809,237 units blood from 2,300,713 persons
In 2020, collected 2,429,302 units blood from 1,932,936 persons
In 2021, collected 2,751,692 units blood from 2,239,34 persons
In 2022, collected 2,809,765 units blood from 2,328,069 persons
In 2023, collected 2,674,375 units blood from 2,288,903 persons



Of the total 848,586 units blood collected in 2009, 195,356 units collected from regular donors. (23%)
Of the total 1,014,516 units blood collected in 2010, 309,221 units collected from regular donors. (30%)
Of the total 1,276,212 units blood collected in 2011, 417,401 units collected from regular donors. (33%)
Of the total 1,469,807 units blood collected in 2012, 524,987 units collected from regular donors. (36%)
Of the total 1,640,878 units blood collected in 2013, 619,863 units collected from regular donors. (38%)
Of the total 1,860,258 units blood collected in 2014, 724,570 units collected from regular donors. (39%)
Of the total 1,937,932 units blood collected in 2015, 806,432 units collected from regular donors. (42%)
Of the total 2,141,765 units blood collected in 2016, 869,883 units collected from regular donors. (41%)
Of the total 2,391,573 units blood collected in 2017, 982,502 units collected from regular donors. (41%)
Of the total 2,571,482 units blood collected in 2018, 1,460,514 units collected from regular donors. (57%)
Of the total 2,809,237 units blood collected in 2019, 1,518,374 units collected from regular donors. (54%)
Of the total 2,429,302 units blood collected in 2020, 1,401,880 units collected from regular donors. (58%)
Of the total 2,751,692 units blood collected in 2021, 1,460,014 units collected from regular donors. (53%)
Of the total 2,809,765 units blood collected in 2022, 1,448,970 units collected from regular donors. (52%)
Of the total 2,674,375 units blood collected in 2023, 1,269,316 units collected from regular donors. (47%)
Of the total 2,779,311 units blood collected in 2024, 1,285,103 units collected from regular donors. (46%)



NUMBER OF BLOOD DONATIONS COLLECTED BY CENTER OR TEAM BY YEARS



NUMBER OF TEAMS AND TEAM PERFORMANCE ACCORDING TO BLOOD COLLECTION IN THE YEARS 2015 TO 2014

	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024
NUMBER OF TEAMS	42.222	38.765	38.974	41.650	40.770	37.488	41.975	44.907	39.510	41.263
BLOOD COLLECTED BY TEAM	1.495.700	1.621.935	1.821.735	1.958.981	2.076.098	1.581.770	1.818.279	1.857.270	1.628.482	1.740.091
PERFORMANCE (number of blood collections per team)	35	42	47	47	51	42	43	41	41	42

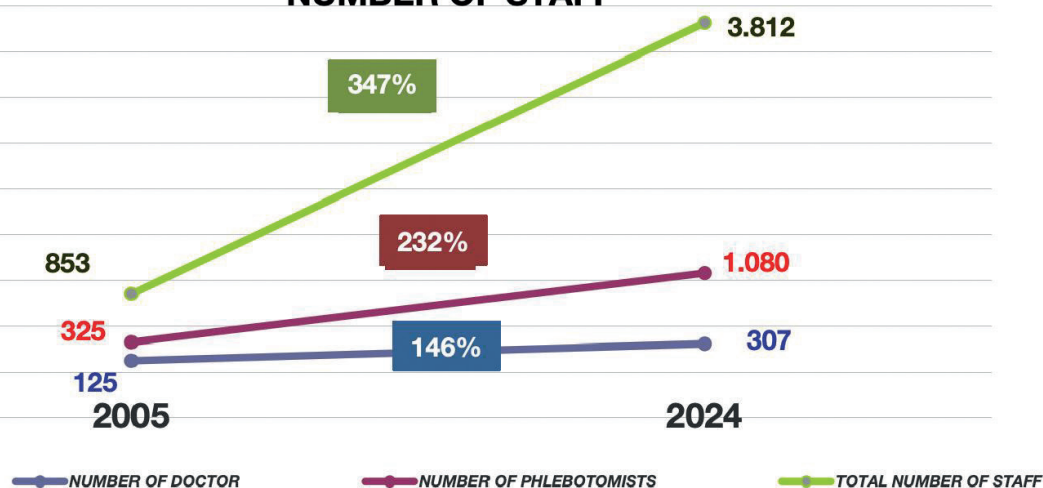
NUMBER OF STAFF AND BLOOD DONATIONS IN THE YEARS 2005-2024

	2005	2024	INCREASE
NUMBER OF DOCTOR	125	307	146%
NUMBER OF PHLEBOTOMISTS	325	1.080	232%
TOTAL NUMBER OF STAFF	853	3.812	347%
NUMBER OF BLOOD DONATION	342.146	2.779.311	712%

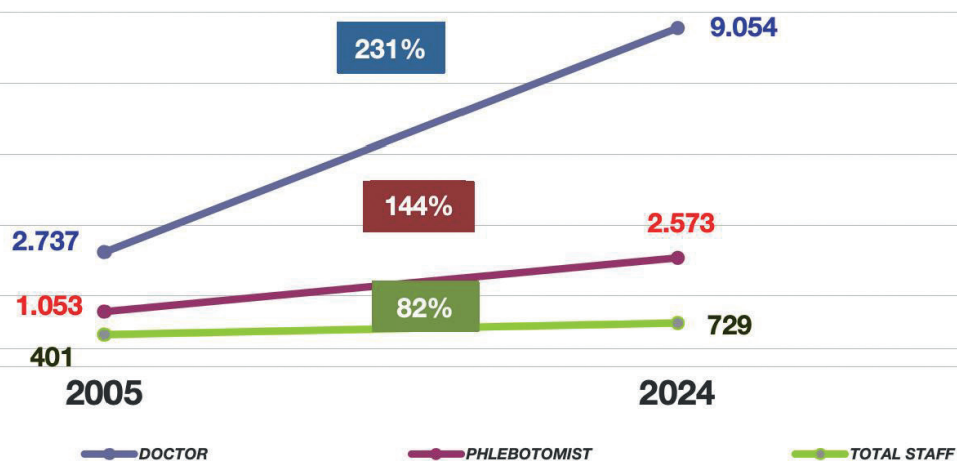
BLOOD COLLECTIONS PER STAFF IN THE YEARS 2005-2024

	2005	2024	INCREASE
DOCTOR	2.737	9.054	231%
PHLEBOTOMIST	1.053	2.573	144%
TOTAL STAFF	401	729	82%

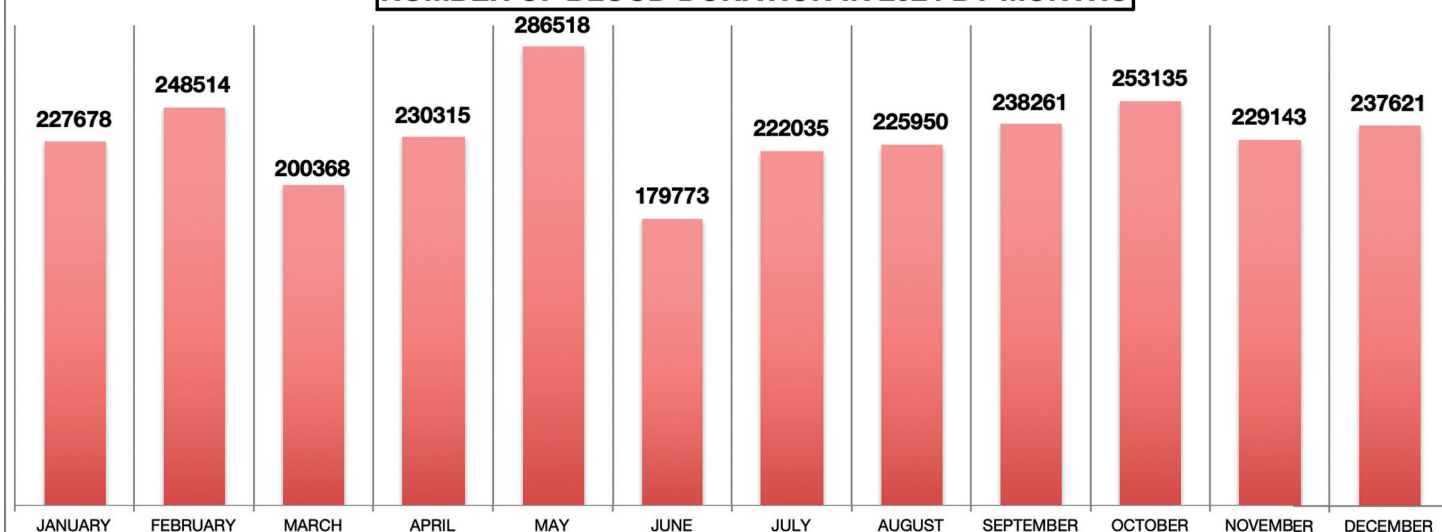
NUMBER OF STAFF

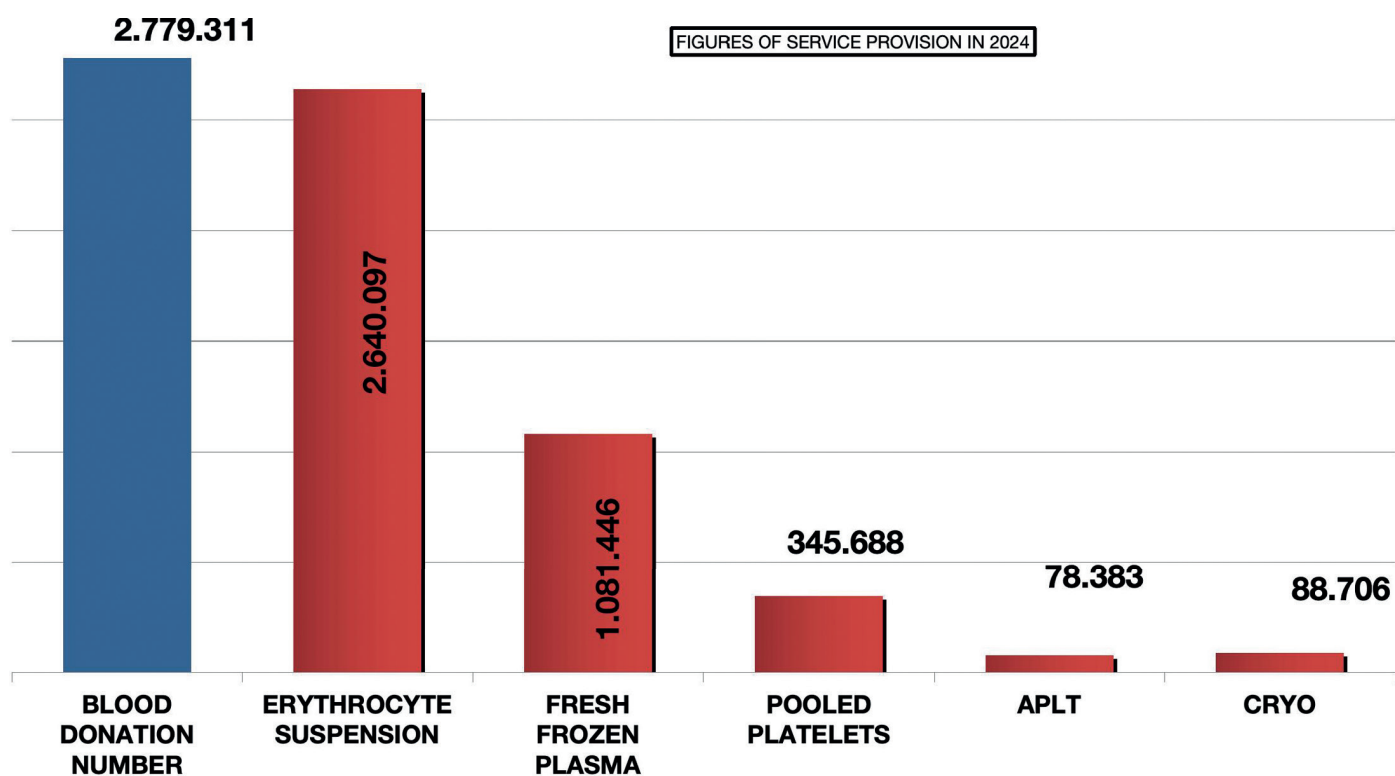
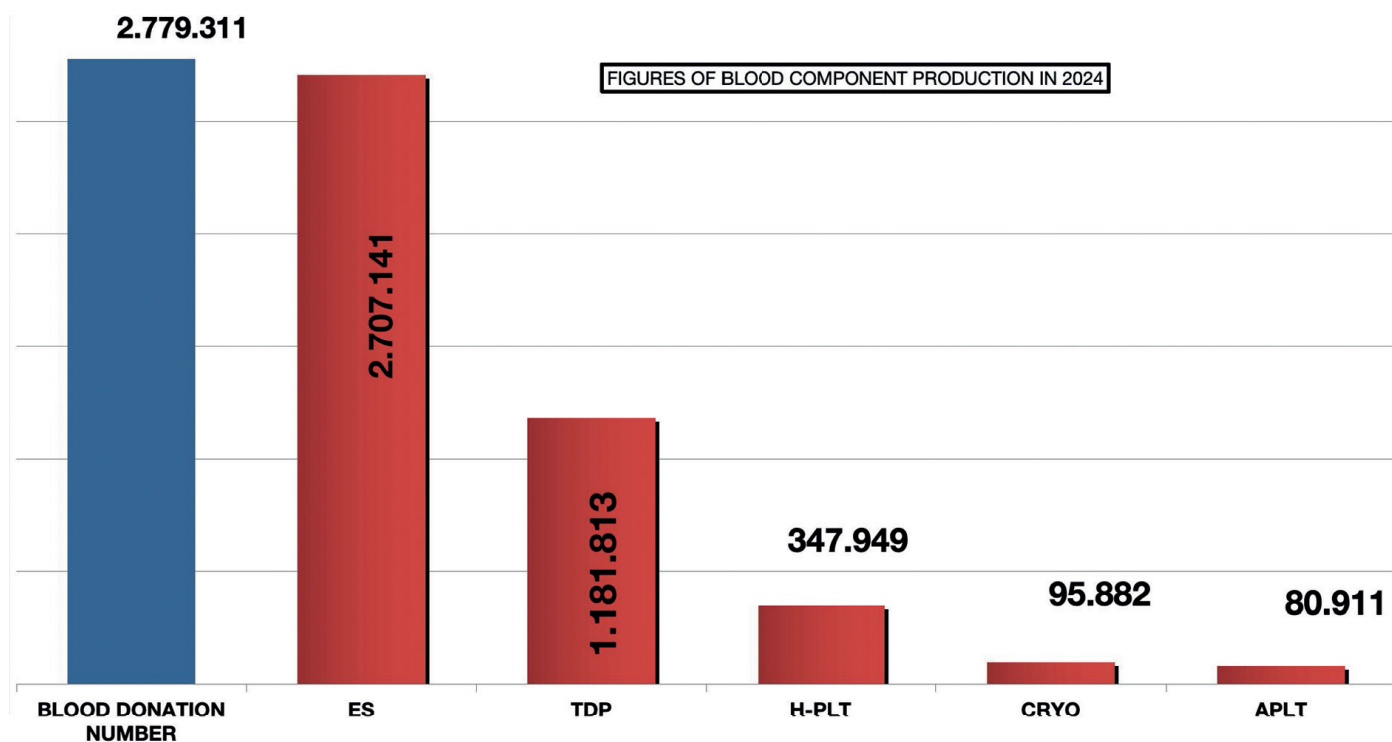


NUMBER OF BLOOD COLLECTION PER STAFF

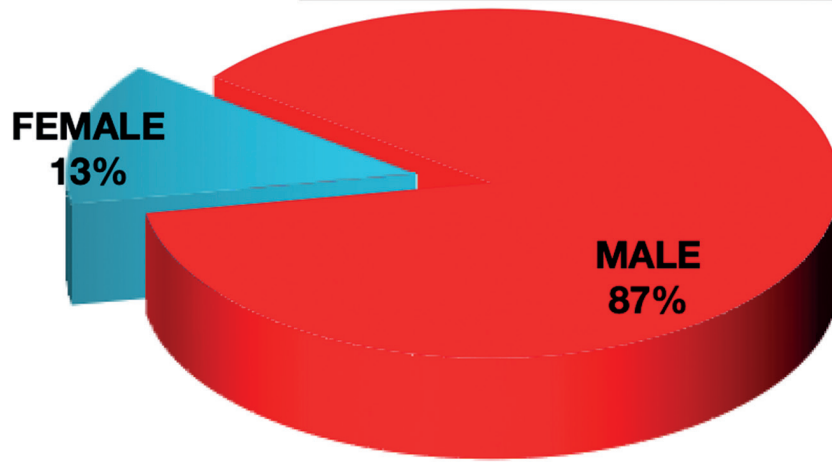


NUMBER OF BLOOD DONATION IN 2024 BY MONTHS

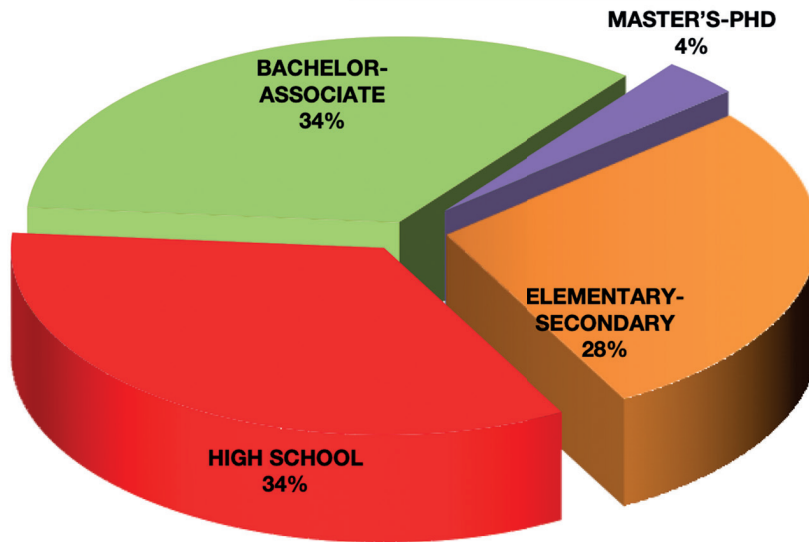




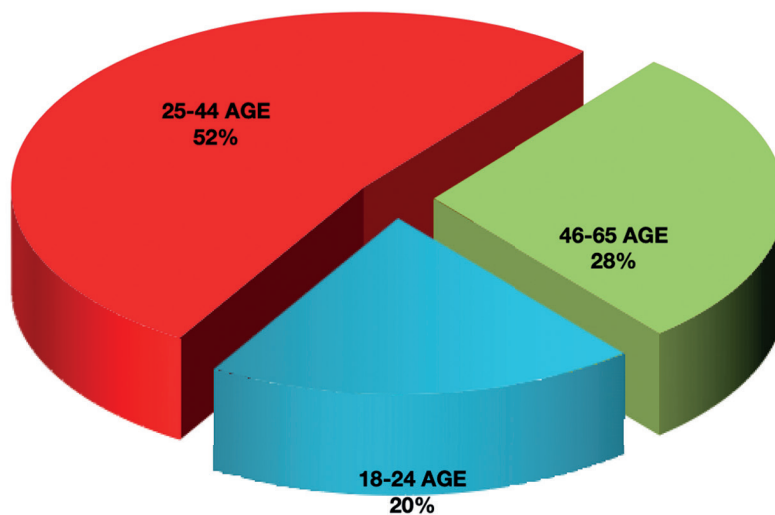
GENDER DISTRIBUTION OF BLOOD DONORS IN 2024



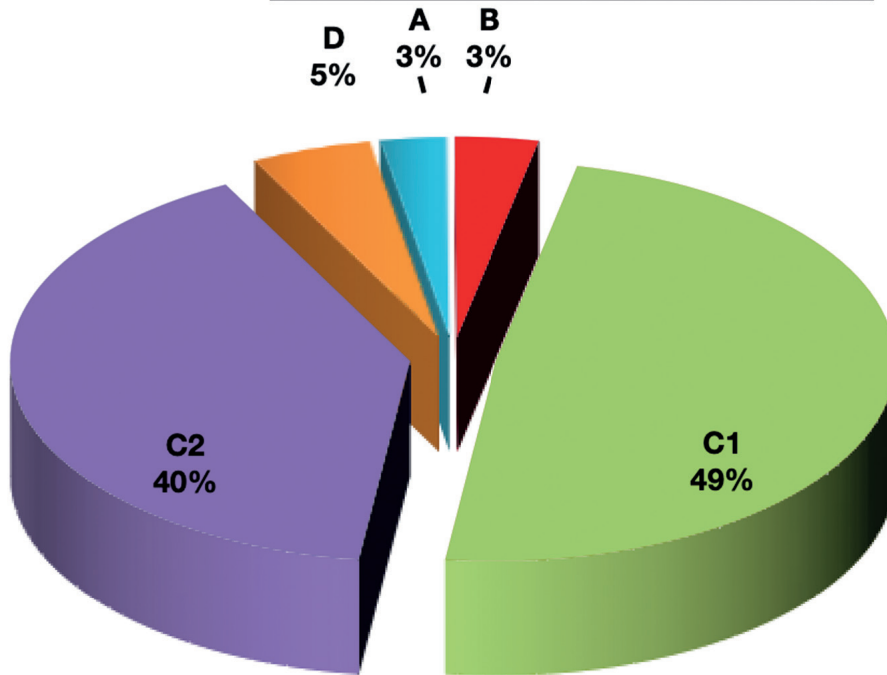
EDUCATIONAL STATUS OF BLOOD DONORS IN 2024



AGE DISTRIBUTION OF BLOOD DONORS IN 2024

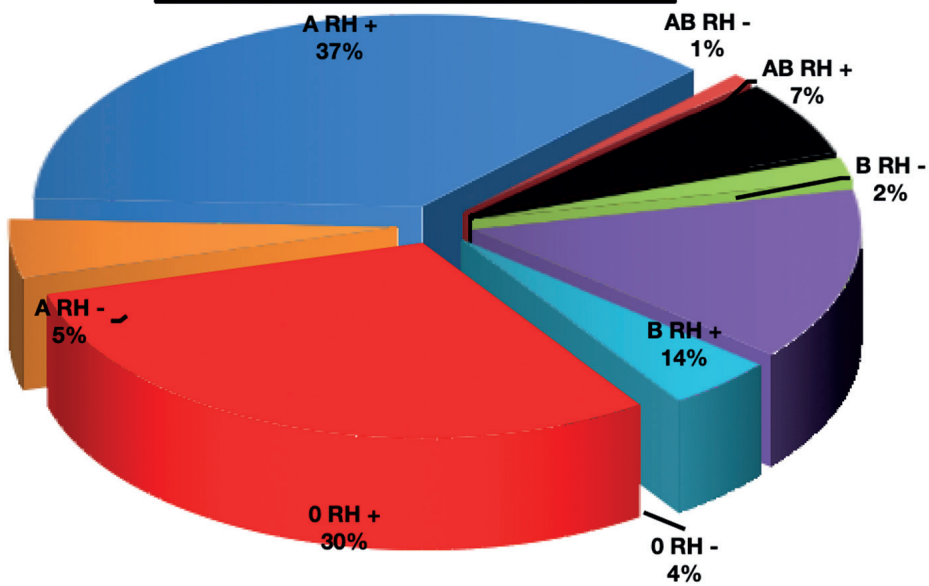


OCCUPATION DISTRIBUTION OF BLOOD DONORS IN 2024



A: University Professor, Lawyer, Doctor, Judge, Healthcare Worker
B: Architect, Engineer, Manager
C1: Student, Public Officer, Freelancer
C2: Retired, Worker, Driver, Farmer, Soldier, Shopkeeper, Security Officer, Technician
D: Housewife, Unemployed

BLOOD TYPE DISTRIBUTION OF BLOOD DONORS IN 2024



BLOOD DONOR DENIAL REASONS								
	2021		2022		2023		2024	
	NUMBER OF DENIAL	DENIAL RATE	NUMBER OF DENIAL	DENIAL RATE	NUMBER OF DENIAL	DENIAL RATE	NUMBER OF DENIAL	DENIAL RATE
Low/High Level of Hemoglobin	153.404	4,8%	162.989	5,0%	199.530	6,2%	193.475	5,8%
Other	182.606	5,7%	68.911	2,1%	87.387	2,7%	70.814	2,1%
Surgery	39.361	1,2%	60.918	1,9%	67.293	2,1%	70.572	2,1%
Tattoo, Acupuncture, Piercing	17.162	0,5%	56.225	1,7%	55.089	1,7%	85.666	2,6%
Systemic Diseases	1.338	0,0%	23.775	0,7%	34.923	1,1%	29.603	0,9%
Medication Use	12.776	0,4%	15.371	0,5%	17.136	0,5%	19.124	0,6%
Malaria History	2.986	0,1%	4.403	0,1%	10.747	0,3%	9.351	0,3%
Risky Intercourse	3.784	0,1%	11.470	0,3%	10.129	0,3%	14.105	0,4%
Dental Treatment	5.835	0,2%	6.364	0,2%	8.052	0,3%	9.265	0,3%
Low Blood Pressure	3.297	0,1%	6.778	0,2%	8.036	0,3%	8.477	0,3%
Vaccine / Immunization	13.645	0,4%	6.930	0,2%	6.244	0,2%	6.637	0,2%
Donor Not Feeling Well	2.880	0,1%	6.007	0,2%	5.478	0,2%	8.371	0,2%
Diarrhea	3.501	0,1%	3.849	0,1%	5.293	0,2%	5.430	0,2%
Fever (Bacteremia)	4.107	0,1%	6.642	0,2%	5.501	0,2%	5.454	0,2%
Viral Hepatitis History	3.020	0,1%	3.643	0,1%	4.613	0,1%	1.905	0,1%
Weight Less Than 50 Kg	496	0,0%	2.083	0,1%	2.169	0,1%	2.032	0,1%
Infectious Disease	4.592	0,1%	28.911	0,9%	1.451	0,0%	31.446	0,9%
Epilepsy	1.170	0,0%	1.261	0,0%	1.252	0,0%	1.204	0,0%
IV Drug Addiction	193	0,0%	854	0,0%	720	0,0%	146	0,0%
Pregnancy	245	0,0%	266	0,0%	233	0,0%	290	0,0%
Intoxication	88	0,0%	111	0,0%	157	0,0%	134	0,0%
Older than age of 65	1	0,0%	11	0,0%	23	0,0%	15	0,0%
Younger than age of 18	8	0,0%	0	0,0%	10	0,0%	6	0,0%
HIV History	4	0,0%	1	0,0%	4	0,0%	0	0,0%
TOTAL	456.499	####	477.773	####	531.470	####	573.522	####
NUMBER OF BLOOD DONATION	2.751.692		2.809.765		2.674.375		2.779.311	
TOTAL NUMBER OF APPLICATIONS	3.208.191		3.287.538		3.205.845		3.352.833	

DISTRIBUTION OF DISPOSAL REASONS				
		2022	2023	2024
ES	POSITIVE TEST RESULT	18.816	15.659	16.651
	EXPIRATION	1	-	1
	LOW VOLUME	1.647	967	811
	OTHER	24.978	25.392	37.505
	TOTAL	45.442	42.018	54.968
TDP	POSITIVE TEST RESULT	4.422	3.314	3.315
	EXPIRATION	-	-	-
	LIPID CONTENT	825	481	448
	OTHER	22.368	18.205	11.951
	TOTAL	27.615	22.000	15.714
H-PLT	EXPIRATION	5.402	3.166	1.950
	Erythrocytes	123	50	68
	Sterile Tube Coalescer	14	12	14
	OTHER	573	417	464
	TOTAL	6.112	3.645	2.496
CRYO	POSITIVE TEST RESULT	-	1	1
	LOW VOLUME	13	2	2
	LIPID CONTENT	33	8	25
	OTHER	1.374	991	1.270
	TOTAL	1.420	1.002	1.298



TÜRK
KIZILAY

**GENERAL DIRECTORATE OF
BLOOD SERVICE**

2024

ANNUAL REPORT