

103  
台灣血液基金會 年報  
The Taiwan Blood Services Foundation  
Annual Report 2014



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103

# 台灣血液基金會 年報

The Taiwan Blood Services Foundation  
Annual Report 2014

# 目錄

## INDEX



- 4 董事長的話  
Some Words from the Chairman
- 6 捐血事業簡史  
A Brief History of Blood Donation Services in Taiwan
- 9 目的與任務  
Goals and Functions
- 10 組織架構  
Organization
- 12 第七屆董事會  
The 7th Term of Board of Directors



### 業務報告 Program Activities

- 14 業務處  
Operation Department
- 18 研究處  
Research Department
- 21 公關處  
Public Relations Department
- 34 資訊處  
Information Department
- 36 財務處  
Financial Department
- 38 行政處  
Administration Department
- 40 台北捐血中心  
Taipei Blood Center
- 46 新竹捐血中心  
Hsinchu Blood Center
- 51 台中捐血中心  
Taichung Blood Center
- 57 台南捐血中心  
Tainan Blood Center
- 62 高雄捐血中心  
Kaohsiung Blood Center
- 68 花蓮捐血中心  
Hualien Blood Center



### 73 大事紀 Chronicles



## 統計表 Operation Statistics

- 86 歷年捐血量趨勢圖  
Annual Blood Collection, 1974-2014
- 87 歷年各捐血中心捐血量  
Annual Blood Collection by Blood Centers,  
1974-2014
- 88 歷年供血量趨勢圖  
Annual Blood Supply, 1974-2014
- 89 103年全血及成分血供應量  
Blood and Blood Components Issued in 2014
- 90 103年各捐血中心每月捐血量  
Monthly Blood Collection by Blood Centers  
in 2014
- 91 近五年每千人口國民全血捐血量  
Whole Blood Collection per 1,000 Head of  
Population, 2010-2014
- 92 近五年捐血人次及國民捐血率  
Blood Donation by Blood Centers, 2010-2014
- 93 103年捐血類型分析  
Types of Blood Donation: Whole Blood vs.  
Platelet Apheresis in 2014
- 93 近五年捐血類型分析  
Whole Blood vs. Platelet Apheresis, 2010-2014
- 94 近五年500毫升捐血佔全血人次百分比  
Whole Blood Donation Rate by 500ml,  
2010-2014
- 95 103年首次捐血人數及所占比率  
New Donors Recruitment in 2014
- 95 近五年首次捐血趨勢變化  
Variation of New Donors Rate, 2010-2014
- 96 103年捐血年齡／性別人次及所占比率  
Distribution of Donations by Gender and Age  
in 2014
- 96 近五年捐血人年齡趨勢  
Distribution of Donations by Age, 2010-2014
- 97 103年各年齡層／性別捐血次數  
Donation Frequency by Gender and Age in 2014
- 97 103年捐血人性別／年齡層／平均捐血次數  
趨勢圖  
Donation Frequency by Gender and Age in 2014
- 98 103年捐血人職業統計  
Occupational Distribution of Donors in 2014

- 99 103年捐血地點分析  
Blood Collection by Sites in 2014
- 100 103年捐血前體檢不合格  
Pre-Donation Donor Deferral in 2014
- 101 103年血液檢驗不合格統計  
Blood Screening in 2014
- 102 103年ABO及Rh血型總數及比例  
Statistics of ABO and Rh in 2014
- 102 103年ABO亞型資料庫  
Statistics of ABO subgroups in 2014
- 103 稀有血型冷凍紅血球庫存數量  
(至103年12月31日)  
Inventory of Rare RBCs (till 31 December, 2014)
- 104 103年本會及各捐血中心人員配賦  
Human Resources in 2014
- 105 103年經費收支  
Incomes and Expenditures in 2014



## 附錄 Appendix

- 108 全國捐血地點通訊一覽表  
Address and Telephone
- 116 捐血者健康標準  
Criteria for Donor Selection
- 118 附表：捐血者健康篩檢項目  
Screening Items for Blood Donors
- 119 捐血機構分佈  
Distribution of Blood Collection Facilities



## 121 論文摘要 Research Abstracts

# 董事長的話

## Some Words from the Chairman



因緣際會之下，我到基金會任職董事長已經滿一年了。

在這一年裡，與捐血機構全體同仁們一起完成了很多事，也制定了一些未來必須要完成的目標。壓力更大，要克服的困難也更多；但是為了捐血事業的永續發展，唯有不斷向前邁進，才能把血液事業推向下一個高峰。

我們年內也與台灣輸血學會合作，建置輸血反應監視通報作業系統，提昇國內整體輸血安全並協助醫療機構檢視及鑑別輸血不良反應，藉以改善血液品質，造福更多用血病人，未來輸血反應監測也是我們要投入更多的工作，也希望政府部門能將這項重要的醫療措施納入醫院評鑑項目，更為醫療品質把關。

為降低接受輸血的病人發生輸血相關不良反應的風險，未來在捐血者篩選及血液供應上即將導入男性血漿優先供應臨床輸血以及女性分離術捐血者增加白血球抗體篩檢兩種措施；其他如血小板諮詢檢驗、血型諮詢實驗室、有助於定期捐血人自我健

康管理的幾項檢驗，也都在積極的進展當中；B肝及C肝的輸血感染也已經能納入道義救濟的範圍。

未來，我們會期許自己往更高的目標前進；捐血事業服務目標不僅僅是維持捐血、供血的平衡而已；未來除了要在服務面更加重視之外，血液科技研發、輸血醫學的發展、血液品質的嚴格控管、安全用血的使命等，都責無旁貸，這是我們工作職責上應該有的承諾。

在台灣，我們是獨一無二的捐血機構；捐血人的愛心無價，也是台灣醫療史上最值得驕傲的一頁；除了感謝，我們要更珍惜每位捐血人的熱心及健康。我們將懷抱著捐血人的無私奉獻來化為無比的動力，完成未完成的使命，將台灣捐血機構打造成亞洲血液事業的領頭羊，可以與歐美等先進國家並駕齊驅，將台灣捐血機構推向國際！

葉金川

Thanks to a chance encounter, I have been the Foundation's Chairman for a full year.

In the past one year, it is my real honor to work with all of my colleagues of the Taiwan Blood Services Foundation. We achieved a lot of things and set a number of goals for future. The pressure is greater and there are more difficulties to overcome. For the sustainable development of the blood donation services, we can only continue moving forward to reach the next summit.

This year, we cooperated with the Taiwan Society of Blood Transfusion to build a national hemovigilance program for monitoring blood transfusion reactions that will assist medical institution in reviewing and identifying adverse transfusion reactions in order to improve the overall safety of domestic blood transfusions. In the future, we shall put greater emphasis on transfusion reaction monitoring and encourage the government to incorporate this important health measure into hospital accreditation programs as a quality check for health care.

To reduce the risk of transfusion related acute lung injury, strategy of male-predominant plasma and leukocyte antibody screening for female apheresis platelet donors will be introduced. In addition, we are actively moving in development of genomic testing of red cell and platelet-specific antigens to assist patients who require multiple transfusion in acquiring matched blood and blood components. Moreover, transfusion-transmitted HBV and HCV infection have

been covered in the scope of moral relief payment in addition to HIV infection.

In the future we will push ourselves to reach even bigger goals. The mission of blood donation service is not just to maintain a balance between blood donations and blood requirements, but also pay more attention to our services. We need to be dedicated to the research and development of blood technology and blood transfusions, strict blood quality control, the safe use of blood and continuing care for blood donors. These are the ideas that we are committed to in our jobs.

We are the only blood donation services in Taiwan. We are all extremely proud of the priceless love and generosity of the donors; in addition to showing our gratitude, we need to cherish every blood donor's health and enthusiasm. We will transform the selfless dedication of blood donors into the force to complete our unfinished mission and develop our foundation into a leader in Asia. We aim not only to keep abreast with more advanced countries, but to promote the Taiwan Blood Services Foundation worldwide!

*Ching-Chuan Yeh*

# 捐血事業簡史

## A Brief History of Blood Donation Services in Taiwan

民國63年以前，台灣的醫療用血幾乎全係有價供應，不僅有違文明，損害國家體面更有傳染疾病之虞。於是一些熱心公益的機關、社團、學校、公司、工廠等，共同發起推動愛心人士捐獻熱血運動，提振關懷社會的公德心，救助需血使用的病患。中華民國捐血運動協會遂於63年4月19日，在當時紅十字會台灣省分會會長蔡培火先生倡導下成立，從此台灣逐步走入無償捐血時代。

捐血運動協會為有效執行捐供血作業，從63年8月起相繼成立台北、台中、高雄、台南等4個捐血中心，在各地積極展開捐供血工作。

為配合國家醫療政策、健全無償捐供血制度，中華民國捐血運動協會第6屆第2次會員代表大會決議捐助設置「財團法人中華民國捐血事業基金會」，奉行政院衛生署（現為衛生福利部）79年1月3日衛署醫字第850280號函核定於民國79年1月1日成立。原捐血運動協會所屬台北、台中、台南、高雄等捐血中心於同日起改隸基金會。民國80年以後，又相繼成立花蓮、新竹捐血中心。

台灣血液機構擴大與世界先進國家聯繫，提高血液科技研究水準，是一種必然趨勢。為了便於運作，奉行政院衛生署核定於81年7月1日起，更名為

「財團法人中華血液基金會」。中華血液基金會成立後，中華民國捐血運動協會繼續運作，並於86年3月第8屆第一次會員代表大會決議更名為「中華捐血運動協會」，目前擁有團體及個人會員千餘，和基金會的事業，相輔相成，對於支持捐血運動之推展，有正面而關鍵性影響。協會之運作，係在各捐血中心內成立聯絡中心，負責會員服務聯繫。所經辦的「熱血雜誌」，每個月出刊一次，為捐血文宣工作重要工具。

為因應國際交流及實際情況需要，「財團法人中華血液基金會」經第4屆第7次董事會議通過，更名為「財團法人台灣血液基金會」，奉行政院衛生署核復同意，於93年10月18日完成法人登記。本會於97年4月21日修正法人名稱為「醫療財團法人台灣血液基金會」。

本會係依據民法及醫療法之規定由中華捐血運動協會捐助設立之非營利性財團法人醫療機構，主管機關為衛生福利部，供應全國百分之九十九以上之醫療用血。多年來，台灣血液事業在政府的領導、社會大眾的支持以及本會全體工作人員的努力下才有今日的規模。未來更應百尺竿頭，以捐血快樂、用血安全為經營理念，為醫療用血嚴格把關，為捐血者與用血者做最完善的服務。





仁義號捐血車。

Prior to 1974, almost all blood for medical use in Taiwan was supplied by paid donation. This practice was considered uncivilized and was also negative to the national image. It was also unsafe and could transmit infections. Subsequently, a number of public-spirited organizations, societies, schools, business enterprises and factories joined together to start a movement to promote voluntary blood donation by appealing to the goodwill of the society and to help patients in need of blood. The Blood Donation Association of the Republic

of China(BDA) was thus, under the initiation of Mr Pei-Huo Tsai, then President of the Red Cross Society of the Republic of China Taiwan Provincial Chapter, founded on April 19, 1974. Taiwan then entered the age of non-remunerated blood donation services.

To effectively promote blood donation, the BDA set up four blood centers in Taipei, Taichung, Kaoshiung and Tainan to actively promote blood donation since August 1974.



To coordinate with the national health policies and to strengthen the non-remunerated blood service system, the BDA, at its second meeting of representatives of the sixth session, resolved that the Blood Services Foundation of the Republic of China be established. Upon approval of the Department of Health of the Executive Yuan, the Foundation was officially inaugurated on January 1, 1990. The four blood centers in Taipei, Taichung, Kaohsiung and Tainan of the BDA were then placed under the Foundation. In 1991, two more blood centers in Hualien and Hsinchu were set up.

For Taiwan's blood services institutions to upgrade their levels in blood technologies and research, close international exchange and collaboration are essential. For the convenience of business operation, upon approval of the Department of Health of the Executive Yuan, the Foundation was renamed the Chinese Blood Services Foundation (CBSF) on July 1, 1992. The Blood Donation Association of the Republic of China continued to function alongside of the Foundation. In March 1997, at its first meeting of representatives of the 8th session, the Association was renamed the Chinese Blood Donation Association. The Association currently has a membership of some 1,000 institutions and individuals. It supports and supplements the activities of the Foundation by coordinating its members through liaison centers set up in the blood

centers. Its monthly publication, "the Warm Blood", is widely circulated and serves as an important tool for the promotion of blood donation.

For more effective international exchange and to face realistic situations, at the 7th meeting of the 4th Board of Directors, a resolution was reached to change the name of the Chinese Blood Services Foundation to the Taiwan Blood Services Foundation (TBSF). Upon approval of the Department of Health of the Executive Yuan, the Foundation was registered as a corporate body on October 18, 2004. On April 21, 2008, the name of the Corporate was amended to Medical Corporate Taiwan Blood Services Foundation.

In accordance with regulations of the Civil Law and the Medical Care Act, the non-profit corporate medical institutions TBSF was set up by the Chinese Blood Donation Association to supply more than 99% of blood for medical use in the country. The competent authority is the Department of Health of the Executive Yuan. That the blood services of Taiwan have reached the stage of what they are now owe primarily to the leadership of the government, support of the society, and the hard work of the staff of the Foundation. We shall continue to promote further the goals of happy blood donation and safe blood use to supply blood for medical use and to provide blood donors and recipients with the best possible services.

## 目的與任務

## Goals and Functions

本會以建立無償捐供血制度，辦理捐、供血業務，提高醫療用血品質，保障病患權益，增進國民健康為目的。任務包括：

1. 捐血事業之策劃與執行事項。
2. 捐血制度之建立及用血安全之研究發展事項。
3. 血液科技之研究事項。
4. 各地公私立醫院病患用血之採集、檢驗、與供應事項。
5. 捐血人健康維護研究事項。
6. 不適輸用血液之利用及安全處理事項。
7. 重大災變或戰時大量用血之籌劃供應事項。
8. 國產血漿製劑之委託製造、儲存及供應事項。
9. 其他有關捐供血事項。

The Foundation is to establish a non-remunerated blood donation and supply system, to conduct donation and supply of blood, to improve the quality of blood for medical use, to protect the rights of patients, and to enhance the health of the citizens. Specifically, the functions of the Foundation are:

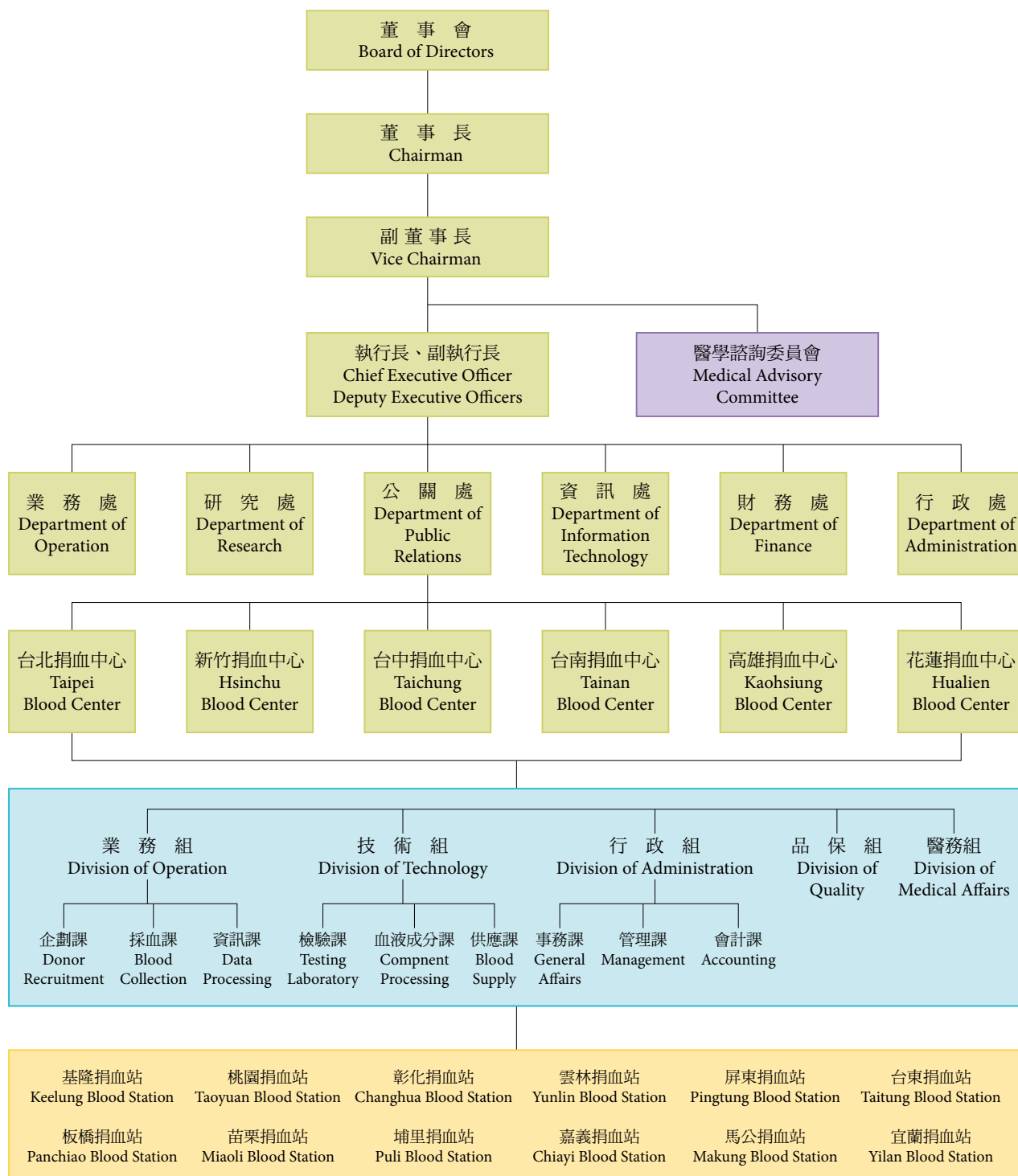
1. To plan and implement blood donation services;
2. To establish blood donation systems, and to conduct research and development on safe blood use;
3. To conduct research on blood science and technology;
4. To collect, laboratory-test, and supply blood for patients of public and private hospitals;
5. To conduct research on the health maintenance of blood donors;
6. To conduct matters concerning the use and safety management of blood unsuitable for transfusion;
7. To plan and supply blood in large quantity at times of major disasters or wars;
8. To commission toll fractionation, to storage and supply domestic plasma derived products;
9. Other matters concerning blood donation and supply.

## 組織架構

## Organization

本會設董事會為最高權力機構，由董事13人及監察人1人所組成，任期4年，均為無給職，但董事長得支領酬勞費。董事中4人由中央衛生福利主管機關推薦之人選充任之。中央衛生福利主管機關推薦董事人選，須就醫事、藥政、防疫及血液科技等專業領域推薦適當之代表，其本職異動時，應隨本職進退，並更改推薦繼任人選，至原任期屆滿時為止。其餘董事9人由本會自行選聘。董事與監察人連選得連任，但連選連任董事每屆不得超過三分之二，其中由中央衛生福利主管機關推薦之4位董事，連任者不得超過2位。董事互選董事長、副董事長各1人綜理會務，並置執行長1人、副執行長2人，另設有醫學諮詢委員會協助醫療技術有關問題。執行長之下設業務、研究、公關、資訊、財務、行政六處，並在全國適當地點設置台北、新竹、台中、台南、高雄、花蓮6個捐血中心及12個捐血站。

The Board of Directors is the highest authority of the Foundation. The Board has 13 non-salaried members, each for a term of four years. Four of the Board members are recommended by the central competent health authority from appropriate representatives in the professional fields of medical affairs, pharmaceutical affairs, disease control, and blood science and technology. When there is a shift of position of a member, a new member shall be recommended to serve the rest of the term. The rest members of the first Board are appointed by contributors; members of the subsequent Boards are appointed by the previous Board of Directors. They may be re-elected. Members elect among themselves one each Chairman and Vice Chairman to manage the Foundation. A Chief Executive Officer and two Deputy Executive Officers operate the Secretariat, which has six divisions of Business Operation, Research, Public Relations, Information Technology, Finance, and Administration. A Medical Advisory Committee advises on matters concerning medical care. Six blood centers are set up in Taipei, Hsinchu, Taichung, Tainan, Kaohsiung and Hualien. In addition, there are 12 blood stations throughout the country.



## 第七屆董事會 (民國103年1月至106年12月)

The 7th Term of  
Board of Directors  
(Jan. 2014~Dec. 2017)

### 董事長 Chairman

葉金川 Yeh, Ching-Chuan

### 副董事長 Vice Chairman

張上淳 Chang, Shan-Chwen

### 董事 Directors

羅光瑞 Lo, Kwang-Juei

吳伯雄 Wu, Po-Hsiung

楊漢淙 Yang, Han-Chuan

戴東原 Tai, Tung-Yuan

侯勝茂 Hou, Sheng-Mou

郝維善 Hao, Wei-Shann (於104.01.24逝世)

王鏡山 Wang, Ching-Shan

林四海 Lin, Szu-Hai

王宗曦 Wang, Tsung-His

郭旭崧 Kuo, Hsu-Sung

葉明功 Yeh, Ming-Kung

### 監察人 Supervisor

李悌元 Li, Ti-Yuan

### 執行長 Chief Executive Officer

魏昇堂 Wei, Sheng-Tang

### 副執行長 Deputy Executive Officer

楊炳炘 Yang, Ping-Cin

### 各捐血中心主任 Directors of Blood Centers

台北捐血中心 Director of Taipei Blood Center

洪正昇 Hung, Cheng-Shen

新竹捐血中心 Director of Hsinchu Blood Center

楊炳炘 Yang, Ping-Cin

台中捐血中心 Director of Taichung Blood Center

林啟靈 Lin, Chi-Ling

台南捐血中心 Director of Tainan Blood Center

蔡光昭 Tsai, Kuang-Chao

高雄捐血中心 Director of Kaohsiung Blood Center

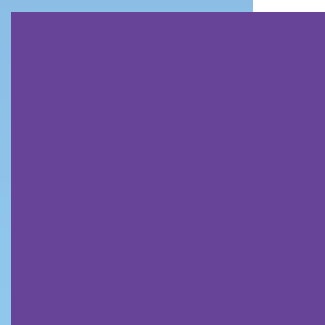
洪啟民 Hung, Chi-Ming

花蓮捐血中心 Director of Hualien Blood Center

王雲龍 Wang, Yun-Lung

# 業務報告

## Program Activities



# 業務處

## Operation Department

### 醫療用血

103年全年捐血目標包括：(1)全血捐血（250ml／袋）2,217,000袋。(2)分離術捐血215,500單位。(3)500ml捐血率達39.6%。實際達成全血捐血（250ml／袋）2,286,164袋，分離術捐血232,361單位，總計2,518,525袋；500ml捐血率達43.1%。三項重要業務指標均達成年度目標。

上述捐血目標係為滿足國內醫療院所需求而訂，分析本會103年各類血品之需求變化，紅血球類（全血及紅血球）供應計2,186,290袋，較102年（2,173,209袋）成長0.6%，血小板類（傳統血小板及分離術血小板）成長0.1%，血漿類（新鮮冷凍血漿、冷凍血漿及冷凍沉澱品）下降2.4%；103年本會總捐血量（2,518,525袋）較102年（2,490,434袋）成長約1.1%。捐血人口比率為7.50%，與102年的7.54%差不多，仍超越許多先進國家水準。

為提升輸血病患血液品質，103年持續推廣製備分離術血小板，年度供應計達229,545袋，佔全部血小板供應量91.7%；其中減除白血球之分離術血小板佔分離術血小板供應量30.4%，供應量較102年成長14.4%。為減低輸血反應、增進病人福祉及提高血液品質，歐、美、亞洲等地區先進國家包括：奧地利、加拿大、德國、愛爾蘭、日本、荷

蘭、西班牙、英國均已陸續實施血品儲存前之全面減除白血球措施，該類血品與醫院自行於病床邊製備儲存後減白血品方式相較，確有顯著降低輸血反應之優點，本會目前儲存前減除白血球血品供應包括減白紅血球濃厚液及減白分離術血小板，已成為近年本會積極推廣之重點，也陸續獲多所公私立醫療院所使用。

另外值得一提的是，根據世界衛生組織（WHO）訂定各國在輸血使用紅血球時是否能充分供應之最低標準為「每千人口數至少要能提供10袋紅血球」，而本會在103年實際提供醫院之紅血球為每千人口數約47.5袋（經換算國際標準血袋，註1），此數值約等同美國2011年之統計數值；因此，國內供血量數量方面不僅達到供應無虞，亦可與先進國家並駕齊驅。

### 國人血液製劑－「國血製劑益康」

血液製劑包括如白蛋白、免疫球蛋白、第八凝血因子、第九凝血因子等，為許多醫院一般病患或特殊如血友病患等所需，但國內歷來幾乎完全仰賴外國進口，國血製劑的誕生，溯自95年底因應國際間血液製劑缺貨，且人體免疫球蛋白因健保核價較低，原進口商紛紛退出台灣市場，當時衛生署邀集本會及醫藥各界代表商議解決之道，乃制訂國血國



用政策，以照顧國內病患權益。本會自96年收集原料血漿，直接送至血漿分離工廠製成國血製劑，並於97年開始供應國人所需，自此打破長年進口藥品獨占之局面，國血製劑對健保之貢獻不言而喻。

103年本會持續配合政府「國血國用」衛生政策，共收集31,049公斤血漿原料，分3批運至澳洲CSL血漿分離工廠，加工製成四種「國血製劑益康」血液製劑：包括20%人血清白蛋白注射劑、人類免疫球蛋白靜脈注射劑、250IU第八凝血因子注射劑及500IU第九凝血因子注射劑，持續供應國內醫療院所使用及為國人健康挹注心力。

另外，本會基於人道救濟立場，及妥善運用寶貴的醫療資源，於103年11月再次捐贈第八凝血因子3,840瓶，捐贈世界血友病聯盟（World Federation of Hemophilia），經由該聯盟轉贈到包括非洲（如柯麥隆、衣索比亞、烏干達、辛巴威、坦桑尼亞、馬利、多哥、迦納）、中東（蘇丹）等多國，台灣捐血人的愛心不僅嘉惠國人，也廣及世界。

### 加強血液安全，防範輸血感染

為加強捐血前篩檢，杜絕HIV輸血後感染案例發生，本會103年持續推動「減少HIV捐入專案」，各捐血中心於各捐血場所，利用宣導短片及海報宣導，以提醒高危險群切勿捐血，各捐血中心、捐血室、車均設置「私密性面談空間」，讓捐血人在私密環境下，能誠實回答問卷及相關問題。此外，也辦理提昇血液安全在職教育訓練，以增進採血人員高危險群面談篩檢技巧。另持續更新「良心回電」單張及製作海報，提供衛生福利部委託愛滋病匿名篩檢醫院資訊，呼籲捐血人勿利用捐血途徑進行愛滋病篩檢。

為加強面談人員之能力及技巧，經常性辦理實務訓練，103年持續邀請專家辦理各捐血中心「採血面談作業教育訓練」課程，及進行神秘客稽核調查，以落實面談作業功能，減少高危險族群捐入。

#### 註1：

國際標準血袋：係指歐美一般所稱標準血袋 standard volume（450~500ml）為一個 donation，亞洲國家則有200/400ml 或像台灣為250/500ml兩種規格。因引用WHO數據比較，此處將（全血及紅血球）供應計2,186,290袋（每袋250ml）/（23,000,000人）X（1,000人）/2（convert to 500ml）=47.5/1,000人口

## Blood for medical use

The 2014 annual donation goals included: (1) whole blood collections (250 ml/bag) of 2,217,000 bags; (2) 215,500 apheresis platelet collections; (3) 500 ml blood donation rate reaching 39.6%. The actual achievements are as follows: whole blood collections (250 ml/bag) of 2,286,164 bags, and 232,361 apheresis platelet collections, which total of 2,518,525 bags; the 500 ml blood donation rate was 43.1%. All three of the aforementioned annual goals were reached.

The blood donation goals mentioned above were set to meet the needs of domestic medical institutions. The Foundation's 2014 analysis shows that with regards to the changes in demand for blood products, the supply of red cell products (whole blood and red blood cell) was 2,186,290 bags, a growth of 0.6% from 2013 (2,173,209 bags); platelet products (random and apheresis platelet) grew 0.1%; and plasma products (frozen fresh plasma, frozen plasma and cryo-precipitate) decreased by 2.4%. In 2014, the total blood collections (2,518,525 bags) grew around 1.1% from that in 2013 (2,490,434 bags). The blood donation population rate was 7.50%, almost the same as the 7.54% in 2013, and is still greater than the rate in many advanced countries.

To enhance blood quality for blood transfusion patients, the Foundation continued to promote apheresis platelets throughout 2014, and the annual supply totaled 229,545 bags, accounting for 91.7% of the total platelet products supply. Leukocyte-reduction apheresis platelets which accounted for 30.4% of the apheresis platelets supply, the supply grew 14.4% from that in 2013. To reduce adverse blood transfusion reactions, improve patients' well-being and improve blood quality, advanced countries in Europe, North America, Asia and other regions, including specifically Austria, Canada, Germany, Ireland, Japan, Holland, Spain and the UK, have implemented measures to universal Leukocyte reduction before

blood products storage. These types of blood products have a significant advantage regarding reduced blood transfusion reactions compared with the Leukocyte-reduction products made from stored blood prepared at hospitals bedside and then have the Leukocyte reduced. Currently, the Foundation's supply of blood products with Leukocyte reduced before storage include Leukocyte-reduced packed RBCs and Leukocyte-reduced apheresis platelets, both of which have become the key of the Foundation's promotion in recent years and have been accepted by many public and private medical institutions.

According to the minimum suitability of supply set by the World Health Organization (WHO), the red blood cells for blood transfusion is "at least 10 bags of red blood cells per one thousand population". The red blood cells actually provided by the Foundation to hospitals in 2014 had about 47.5 bags (blood bags converted into the international standard, note 1) of red blood cells per one thousand population; this number is approximate to the statistics of the United States in 2011. Therefore, the domestic blood supply is not only adequate, but also reaches the same level as advanced countries.

## Domestic plasma-derived products—"domestic plasma-derived products Yikang"

**Plasma-derived products** includes such as albumin, immunoglobulin, coagulation factor VIII and coagulation factor IX, which are required by many general hospital patients and hemophilia patients. However, domestically required plasma-derived products has been almost entirely dependent on imports. The emergence of domestic plasma-derived products can be traced back to the end of 2006 when a shortage of international plasma-derived products supply caused original importers to withdraw from Taiwan's market due to a lower reimbursement price by national health insurance for human immunoglobulin.

At that time, the Department of Health invited the Foundation and pharmaceutical representatives to discuss a viable solution and then formulated a domestic blood for domestic use policy to ensure patients' rights. Since 2007, the Foundation has been collecting plasma and sending it directly to the fractionation factory to have it prepared for domestic plasma-derived products and, in 2008, began to supply the finished products for domestic needs, thus breaking the long monopoly of imported blood-related drugs. The contribution of domestic plasma-derived products to national health insurance is self-evident.

In 2014, the Foundation continued to cooperate with the Government on the "domestic blood for domestic use" health policy and collected 31,049 kilograms of plasma, which was divided into three batches and shipped to Australia CSL plasma fractionation plant to be processed into four kinds of "domestic plasma-derived products Yikang", which included 20% human serum albumin injection, human immunoglobulin for intravenous injection, 250IU coagulation factor VIII and 500IU coagulation factor IX injection, in order to provide a sustainable supply to domestic medical institutions for the health of Taiwan's citizens.

Furthermore, on the basis of humanitarian-aid and the proper use of valuable medical resources, in November 2014, the Foundation once again donated 3,840 bottles of eighth coagulation factor VIII to the WFH (World Federation of Hemophilia), which then transferred it to countries in Africa (such as Cameroon, Ethiopia, Uganda, Zimbabwe, Tanzania, Marley, Togo and Ghana) and the Middle East (Sultan). Taiwan blood donors' love and generosity not only benefits Taiwan's citizens, but also people around the world.

### Strengthening blood safety to prevent blood transfusion infection

In order to strengthen blood donor screening

and eliminate cases of HIV infection after blood transfusion, the Foundation continued the promotion of the "reduce HIV donation project" throughout 2014, and the blood centers in the donation sites used promos and posters to remind high-risk groups not to donate blood. Each blood center, blood chamber and blood vehicle has a "private interview space" to enable blood donors to honestly answer the questionnaire and related questions in a private environment. Moreover, the Foundation held in-service training for blood safety enhancement to improve blood personnel's screening and interview skills for high-risk groups. "Conscience callback" leaflets and posters are also updated on a regular basis to provide information about hospitals commissioned by the Centers for Disease Control for anonymous AIDS screening and to urge donors not to use blood donation as a method for HIV screening.

The Foundation regularly conducts practical training to strengthen the capacity and skills of its interview personnel. In 2014, the Foundation continued to invite experts to conduct the "blood collection interview training" course for each blood center and also conducted mystery audits in order to properly implement interview policies and reduce donations by high-risk groups.

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#### **Note 1:**

*International standard blood bag: This refers to European and American blood bags' standard volume (450 ~ 500 ml) as one donation. In Asia, there are different specifications of 200/400 ml or Taiwan's 250/500 ml. Since WHO data was quoted for comparison, the total supply of (whole blood and red blood cells) was 2,186,290 bags (250 ml per bag)/(23,000,000 population)  $\times$  (1,000)/2 (converted to 500 ml) = 47.5/1000 population.*

# 研究處

## Research Department

### 品質保證

台灣血液基金會本部及各捐血中心均通過ISO 9001品質認證；同時，台灣血液基金會本部、台北捐血中心、高雄捐血中心實驗室亦通過全國認證基金會（TAF）之醫學實驗室認證。各項作業程序包括：捐血者篩選、血液採集、血液檢驗、成分製造、儲存管理、血液運送等工作，均依循標準作業手冊（SOPs），並接受國內衛生主管機關（包括食品藥物管理署）、台灣檢驗科技股份有限公司（SGS）等機構之查核。

除此，為將國人血漿運往澳洲CSL血漿工廠（世界主要血漿製劑工廠之一）製造血漿製品，提供國內醫療使用，我們定期接受CSL血漿工廠派員查核，相關作業以及血液品質均經澳洲政府醫藥品管理局（Therapeutic Goods Administration, TGA）審核，核准台灣血漿運往澳洲製造血漿製品。

### 血液安全

為確保輸血安全，醫療用血已全面加測HBV、HCV及HIV-1病毒核酸試驗；使用英國國家標準血清（British working standards）保證每一批次檢驗的敏感度；全面採行自動檢驗設備，包括：PK7300、AU2700、Freedom Evolyzer、TIGRIS、Bact/ALERT 3D等儀器，進行血液傳染病（病毒性

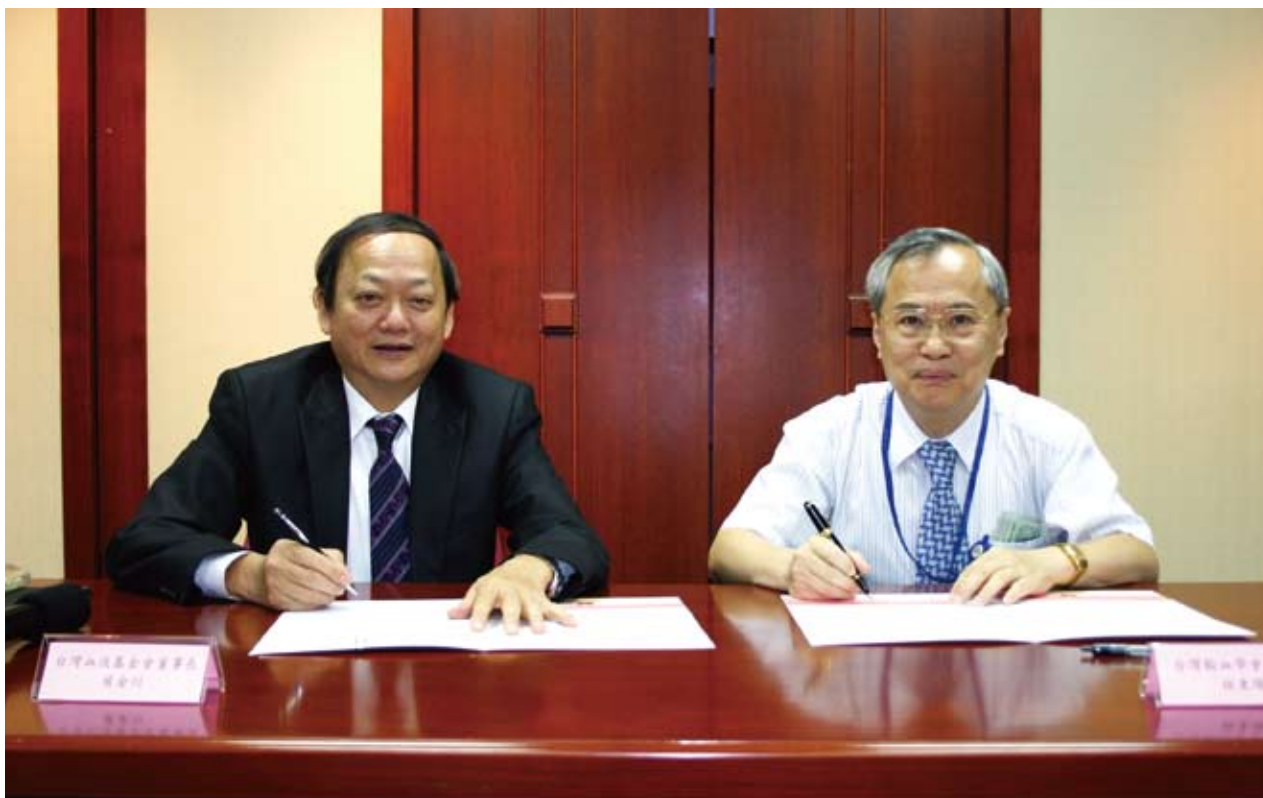
及細菌性）篩檢、血型試驗、抗體篩檢，試驗步驟的進行、試驗結果的判定以及傳送等均經由儀器及電腦設備執行，避免人為疏失，為血液安全做最嚴格的把關。

同時，各捐血中心持續參加國內外之能力試驗（proficiency），包括：美國病理學會（CAP）、澳洲國家血清實驗室（NRL）、美國組織相容免疫基因協會（ASHI）、台灣醫檢學會等機構辦理之能力試驗，檢驗結果的正確性獲得肯定與認可。另設有醫學諮詢委員會，經由國內醫學中心輸血醫學方面以及血液傳染病方面的專家學者，對於血液安全有關事項訂定政策，以為遵行。

### 輸血服務

隨著醫療進步，長期接受輸血治療的病人在臨床上需提供配合血液各種分型的需求亦愈趨增加，有些血液是相當稀少的，我們持續進行捐血者紅血球抗原及HLA分型的檢驗工作，將稀有紅血球予以冷凍長期保存，並持續累積稀有血液捐血者以及HLA分型資料的建檔數量，以充分提供臨床輸血需要。

除此，為協助國內醫療機構處理臨床輸血有關問題，我們持續提供輸血諮詢檢驗服務，包括各種



台灣血液基金會董事長葉金川（左）、台灣輸血學會理事長林東燦（右）共同簽訂「台灣輸血反應通報建置合作協議」，提昇台灣輸血安全。

紅血球抗原及抗體的篩檢或鑑定檢驗服務外，亦提供輸血後不良反應監測等服務。為確保國人輸血安全，確保輸血前抗體篩檢的正確性，我們提供包含完整抗原的紅血球，製成抗體篩檢試劑，提供國內醫療機構使用，為臨床醫療輸血提供最完整的服務。

## 研究發展

為改善血液品質並提升血液安全，各捐血中心及會本部持續各項研究計畫的執行。為落實「受試者保護」並強化研究計畫之倫理審查，各項研究計畫均經「倫理審查委員會」之審查；本會倫理審查委員會通過衛生福利部之查核，為合格之倫理審查委員會。我們的研究成果多經由國際輸血醫學專家的認可，並發表於國際輸血醫學學會及期刊。本年度亦有多篇研究成果獲選，於美國血庫協會（AABB）以及國際輸血學會（ISBT）年會刊載報告。

## Quality assurance

Taiwan Blood Services Foundation's head office and its blood centers have received ISO 9001 quality certification; similarly, the Taiwan Blood Services Foundation's head office, Taipei Blood Center and Kaohsiung Blood Center have passed the Medical Laboratory Accreditation of the Taiwan Accreditation Foundation (TAF). All the work procedures, including blood donor screening, blood collection, blood tests, component manufacturing, storage management and blood transportation, adhere to standard operating procedures (SOPs) and are subject to inspection by domestic health authorities (including the Food and Drug Administration) and SGS.

Furthermore, in order to send domestic plasma to Australia's CSL Plasma (one of the world's major plasma factories) to manufacture plasma products for



domestic medical use, we are regularly inspected by CSL Plasma, and operations and blood quality related to the sending of plasma from Taiwan to Australia for the manufacturing of plasma products are reviewed and approved by the Australian Government's Therapeutic Goods Administration (TGA).

## **Blood safety**

To ensure the safety of blood transfusions, all medical blood is tested for HBV, HCV and HIV-1 virus nucleic acid. British working standards are used to ensure the sensitivity of each batch, and automatic test equipment, including PK7300, AU2700, Freedom Evolyzer, TIGRIS, Bact/ALERT 3D and other instruments, are used for screening of infectious diseases (viral and bacterial), ABO blood grouping and antibody screening. Test procedures and the reviewing and transmission of test results are all carried out with instruments and computer equipment that can avoid human errors and perform the most stringent checks for blood safety.

The blood centers also continue to participate in domestic and overseas proficiency tests, such as the proficiency tests held by College of American Pathologists, (CAP), National Serology Reference Laboratory (NRL), American Society of Histocompatibility and Immunogenetics (ASHI) and Taiwan Medical Institute; the correctness of the test results have obtained affirmation and recognition. The Foundation also has a medical advisory committee that employs experts and scholars of domestic medical centers specializing in blood transfusions and blood infectious diseases to establish policies related to blood safety matters.

## **Blood transfusion service**

As medical technologies advance, the need for compatible blood by long-term blood transfusion patients has increased. Because of the rarity of some blood types, we continue to screen donors for red blood cell antigens and HLA typing to have rare red blood cells frozen and stored on a long-term basis. We also continue to accumulate data related to rare blood donors to meet clinical transfusion requirements.

Furthermore, in order to assist domestic medical institutions in dealing with problems related to clinical blood transfusions, we continue to provide laboratory testing services, including the screening or testing of red blood cell antigens and antibodies, as well as the investigation of post-transfusion adverse reaction. To ensure the safety of blood transfusions, we provide antibody screening cells for domestic medical institutions to provide the most complete services for clinical blood transfusion.

## **Research and development**

To improve both blood quality and blood safety, the blood centers and the Foundation's head office continue implementing research plans. In order to apply "subject protection" and strengthen the ethics review of research projects, all research projects are reviewed by the "Ethics Review Committee". The Foundation's Ethics Review Committee has passed inspection by the Health and Welfare Department and is a qualified ethics review committee. The results of most of our research are been reviewed and published. This year, many studies have also been published in the annual meeting of American Association of Blood Banks (AABB) and the International Society of Blood Transfusion (ISBT).

## 公關處

## Public Relations Department

### 傳愛40 有你真好

103年適逢捐血事業成立40周年，自年初的捐血月開始，即以「傳愛40 有你真好」為主題，延續全年度，做為對外宣傳的精神標語。捐血月記者會於102年12月31日舉辦，會中邀請O型Rh陰性血型的陳玉秋小姐與B型亞孟買型的張麗勤小姐來到現場現身說法，引起相當多的網友共鳴。另邀請捐血達204次的屆齡捐血人王輝雄先生，雖然已不能再捐血，但他加入台中捐血中心志工隊並引以為榮，持續協助推廣捐血救人理念，於記者會中以愛捐血的精神繼續傳承給下一代的捐血人陳永璋先生，並呼籲更多年輕人加入捐血救人的行列。

為使40周年慶的主題「傳愛40 有你真好」能做一個感恩的延續，在103年4月18日下午2點特別先在誠品敦南店舉辦「傳愛

40 有你真好—台灣捐血事業40周年」感恩記者會，會中發表新拍攝的宣傳影片，並邀請到本次參與影片拍攝的各位主角們：沈秋宏先生、喻家貞小姐、許德英先生、張育禎小姐前來，與媒體朋友們面對面，向社會大眾分享最真誠懇切的故事；另外還有當年拍攝「我不認識你，但是我謝謝你」海報的小女孩黃薇年小姐也來到現場，如今已是大女孩；用感性溫馨的記者會揭開40周年序幕。



孫越（左）陳淑麗（右）在40周年慶上接受特殊貢獻獎。





台灣捐血事業舉辦40周年慶，表揚40年來對捐血運動卓有貢獻之團體或個人。

4月19日的慶祝大會，我們選擇40年前捐血事業成立的起點：「台北市中山堂」，在中山堂前廣場辦理「傳愛40 有你真好」台灣捐血事業40周年慶大會，特別具有紀念意義。會中表揚歷年來熱心的捐血人及捐血學校、社團、企業及特殊貢獻；除了特別邀請到內政部陳威仁部長及衛生福利部邱文達部長到場頒獎外，孫越叔叔與陳淑麗小姐也會到現場與大家分享做為捐血終身志工的感言。當天的慶祝大會也結合了102年度的台北捐血中心績優表揚大會，表揚去年度的績優捐血人和團體等等，各方熱血人齊聚一堂，共度這個歷史上的今天。

### 安全血液 挽救母親的生命

每年6月14日全球皆同步慶祝「世界捐血人日（World Blood Donor Day）」，並舉辦各項捐血活

動，也感謝所有默默奉獻的捐血人。103年的主題為「Safe Blood for Saving Mothers」（安全血液挽救母親的生命）。世界衛生組織（WHO）並針對此主題提出呼籲，希望各國除了「醫療用血應100%由自願無償捐血供應」外，更要及時為孕產婦提供安全的血液及血液製劑，以降低孕產婦的死亡率；並指出目前全世界每天約有800名婦女死於分娩過程中和分娩後的嚴重出血。因此，如何獲得安全、充足的血液及血液製劑以及妥善處理輸血問題，在全世界許多國家仍面臨重大挑戰。

為慶祝世界捐血人日，6月13日特舉辦記者會，會中邀請2位曾經發生產後大出血，同時也是捐血人的媽媽分享她們救人自救的故事。林惠菁是一位單親媽媽，20年前在即將臨盆時仍開著計程車載客，途中突然陣痛、羊水破，被載的乘客立刻換

手開車載她到醫院。林女士產後大量出血，經高雄捐血中心緊急供應血液，才挽回母女寶貴的生命。為了感謝捐血人的無私奉獻，林女士及她的2位女兒也都加入了捐血救人的行列，是名符其實的熱血家庭。

另一位鄭雅佩女士，自大學時期就開始捐血，也因此得知她是屬於稀有血型，從此就持續捐血至今。5月初，她在臺北市立婦幼醫院生產第二胎時，突然發生產後大出血；經台北捐血中心即時提供並輸用6單位血液後，鄭女士順利生產。記者會中也特別邀請到當時為鄭女士接生的婦幼醫院主治醫師黃禮偉，說明產後大出血及輸血救治的過程。

稀有血型的定義是指該血型的發生頻率低於千分之一，若低於萬分之一即為「非常稀有」。近年來，本會一直積極加強稀有血型的建檔及保存，以備不時之需；各醫療院所如有病人需要輸血治療時，第一時間應儘快與各地捐血中心或捐血站連繫，捐血機構提供全年無休且24小時的供血服務，我們定當盡全力備妥傷病患者所需要的血品。

## 企業社團 傳遞愛的力量

企業社團支持捐血事業並積極舉辦各項捐血活動。今年全國性社團、部隊及醫療機構共捐得血液704,171袋（每袋250ml），佔總捐血量的27.96%。詳如下表：

103年各企業機構也定期舉辦全國性大型捐血活動，嘉惠用血病患。全國性捐血活動如下：（按活動日期排列）

1. 台灣高鐵公司：102年12月5日～103年1月6日於台北南港總公司及台中、高雄二地站區舉辦捐血活動共3場，捐得血液436袋。
2. 西堤牛排：1月24日～26日及6月14日～30日舉辦「2014百萬熱血青年召集令」活動共捐得血液63,503袋。
3. 新光集團：2月7日～12日舉辦「捐好血、好熱血」活動共12場，捐得血液1,531袋。
4. 群益金融集團：2月7日～3月31日舉辦「群起獻愛心、傳遞幸福公益」活動共6場，捐得血液809袋。
5. 四師總動員：2月14日舉辦第二屆「春暖人間四師愛心捐血救人」公益活動共10場，捐得血液955袋。（四師：會計師、律師、醫師、建築師）
6. 中華郵政公司：2月21日～3月20日舉辦「寒冬送暖熱血情、郵政壽險捐血月」活動共232場，捐得血液31,815袋。

中心別 單位	台北捐血中心	新竹捐血中心	台中捐血中心	台南捐血中心	高雄捐血中心	花蓮捐血中心	總計	百分比
國際獅子會	138,763	73,008	125,714	19,920	11,659	13,133	382,197	54.28%
國際同濟會	27,917	14,972	63,437	4,655	2,297	2,626	115,904	16.46%
國軍部隊	9,488	9,991	11,597	23,490	17,082	6,125	77,773	11.04%
國際佛光會 中華總會	18,513	8,445	14,427	5,977	12,675	1,769	61,806	8.78%
國際扶輪社	11,380	3,369	7,139	11,725	17,238	3,951	54,802	7.78%
醫療院所	1,765	212	4,139	3,181	1,270	1,122	11,689	1.66%
合計	207,826	109,997	226,453	68,948	62,221	28,726	704,171	100%

7. 國際青年商會中華民國總會：3月29日全國同步舉辦「青商會召集令 捐血救人命」活動共30場，捐得血液5,249袋。
8. 南山人壽慈善基金會：5月3日～8月29日舉辦「2014南山熱血召集令捐血活動」共96場，捐得血液12,835袋。
9. 國泰慈善基金會：6月1日～9月6日舉辦「2014夏日捐血活動」共90場，捐得血液17,232袋。
10. 內政部役政署：6月1日～9月30日為鼓勵全國替代役男踴躍捐血，舉辦「替代役役男捐血季」活動，捐得血液19,148袋。
11. 警察廣播電台：6月3日～17日舉辦全國同步「空中傳愛 挽袖捐血」活動共10場，捐得血液1,546袋。
12. 富邦慈善基金會：7月8日～8月27日舉辦「馬上捐熱血」活動共26場，捐得血液4,397袋。
13. 和泰汽車股份有限公司：8月1日～9月4日舉辦「2014和泰汽車全國捐血月」活動共83場，捐得血液6,059袋。
14. 中國信託人壽：9月18日～10月1日舉辦「熱心來捐血 助人大確幸」捐血活動共11場，捐得血液717袋。
15. 逢甲大學校友會：11月1日～22日舉辦「2014年全國校友會同步捐血」活動共19場，捐得血液2,625袋。

## 感恩回饋 出錢又出力

社團、企業與民間，除了辦理各項捐血活動外，更出錢又出力熱心捐贈各項物資。今年各捐血中心共募得大型捐血車6輛、血液運送車5輛、行政宣傳車1輛、空血袋共174,694個。詳如右表：

## 績優表揚讓愛發光

為感謝捐血人的熱血與熱心，本會各捐血中心每年於轄區內舉辦「捐血績優表揚大會」。102年度捐血績優表揚的學校計有146所，獲頒教育部獎狀；社團機構共有318個單位，獲頒內政部獎狀；國軍部隊共有33個單位，獲頒國防部獎狀；另有107個單位或個人榮獲本會特殊貢獻感謝狀。

在個人捐血績優表揚方面，捐全血100單位以上的有6,358人；分離術捐血100單位以上的有5,478人，其中捐血達1,000單位以上者更有217位。此外，分離術捐血達500單位（含）以上、男性捐全血達150單位（含）以上、女性捐全血100次（含）以上者共577位（全血318位；分離術捐血259位）除獲頒行政院衛生署獎狀外，並由中華捐血運動協會理事長分別致贈榮譽紀念章乙枚。

102年度績優捐血人代表晉見總統活動於104年1月8日辦理。今年獲此殊榮的績優捐血代表有：林亨通、王添原、蕭聰傑、郭明倫、周世華、余秀美、鐘東賢、顏進益、陳四明、何進榮、鄭鈴齡、劉坤地、陳滄沂、李岡義、陳宗興、蔣順勝、曾森田、張紹誠、郭功陽、顏春桃、孫飛鵬、高魯蓬、馬勝文、張雲良、施培銘、黃碧英、陳文禮、李智偉、伍進富、陳信寬、鹿洪華妹、許悠浪、吳春杰等共33位；並由本會董事長葉金川及執行長魏昇堂陪同晉見。

中心別 單位	空血袋 (個)	大型捐血車 (輛)	血液運送車 (輛)	行政宣傳車 (輛)
台北捐血中心	89,239	1	1	0
新竹捐血中心	0	4	1	0
台中捐血中心	53,389	0	1	0
台南捐血中心	8,998	0	0	0
高雄捐血中心	6,607	0	2	0
花蓮捐血中心	16,461	1	0	1
合 計	174,694	6	5	1





102年度捐血績優表揚大會董事長葉金川（中）致贈榮譽紀念牌。

### 滿意度調查 重視捐血人需求

103年「捐血服務需求及滿意度調查」於11月1日至11月30日全面展開，調查對象為17～24歲的合格捐血人，藉此瞭解年輕族群對捐血動機、認知等的滿意度；本次調查問卷最終回收數量為10,000份。

經統計，主要結論為：(1)捐血地點的便利性為影響捐血意願的重要考量；高達48.3%的捐血民眾認為捐血便利性會影響捐血意願，其次才是同學或同事的影響（36.1%）。(2)對捐血的認知；對可以捐血的認知，全部答對者佔37.2%；對於不能捐血的認知，全部答對者佔17%，實屬偏低；女性對捐血的認知優於男性，大專生對捐血的認知優於高中生，非首次捐血者對捐血的認知優於首次捐血者。(3)瀏覽過「台灣血液基金會」或「愛捐血」(i-Blood)網站的捐血者，僅為16.1%，本次調查對象首次捐血者比率高達48.7%，故普遍對本會網站尚十分陌生。(4)捐血者四項滿意度的調查，除了「等待時間」的滿意度比例約90%外，其餘三項（「面談人員的服務態度及面談技巧」、「採血人員的服務態度及扎針技巧」及「工作人員是否主動告知捐血流程及前後應注意事項」）的滿意度比例

皆高於95%，顯示捐血者對捐血中心的四項服務品質是肯定的。

### 國際交流 吸取新知

本會積極參與各項國際會議，吸取相關新知；透過與他國的交流，獲得各項改進的重要參考，也是進而瞭解國際現況的重要管道；103年參加之國際會議如包括：

1. 第33屆國際輸血學會（ISBT）會議於6月1日至5日在韓國首爾舉行。本次會議由執行長魏昇堂領隊，團員有台南捐血中心主任蔡光昭、花蓮捐血中心醫師林麗玲、台北捐血中心技術督導陳曉芬、新竹捐血中心技術組長楊婷婷及台中捐血中心技術組長王萱慧等。
2. 2014年美國血庫協會（AABB）國際年會於10月25日至28日在賓州費城舉行。本次會議由研究處長程仁偉領隊，團員有台中捐血中心主任林啟靈及台北捐血中心板橋站長林冠孝等。
3. 2013年第1次亞太血液連線（APBN）會議於5月29日至30日在韓國首爾舉辦；第2次會議於11月

14日至16日在北京舉行，由本會執行長魏昇堂代表出席。

4. 由廣州血液中心及南方醫科大學主辦之「第十六屆中南地區輸血學術交流暨國際隱匿性乙型肝炎病毒感染（OBI）研討會」於10月8日至12日舉辦，公關處長叢萍受邀，並就「獻血者招募」作專題講座。

## 與青年有約

為瞭解17～24歲青少年對捐血的認知，以及捐血中心能提供什麼類型的活動方案能吸引青少年加入捐血的行列，做為日後推動青年成為定期捐血人的重要參考，在11月21日舉辦了「與葉金川有約」熱血青年座談會，邀請到25位青年參與。座談會進行順暢，與會者都相當踴躍發言，不僅讓我們更能體會年輕族群的想法，也從座談會中得到許多不同的發想。

座談會歸納重點包括：教育宣導可以更紮實、行動工具的運用更廣泛、檢驗報告可以更親民、廣宣要更有吸引力、集點紀念品能跨區兌換、針對學校社團可以考慮補助、拍攝微電影製造話題、捐血地點及時間可以更便利、餅乾飲料可以更多樣化、捐血意義再昇華。

## 愛心志工 提昇服務品質

各捐血中心加強宣導及服務捐血人，捐血志工除了平日積極參與捐血外，也協助提供服務；各捐血中心志工今年榮獲獎項如下：

**新竹捐血中心：**曾秋華、廖素蘭、湯月員等分別獲頒「新竹縣志願服務金質獎章」；丁金環獲頒「新竹縣志願服務銀質獎章」；吳敏男、巫清國、黃國賓、劉嘉惠等分別獲頒「桃園縣衛生保健志工銅牌獎」。

**台中捐血中心：**台中捐血中心志工隊長李榮欽榮獲「臺中市政府衛生局103年績優衛生保健志工蘭馨獎」。

**台南捐血中心：**陳採眉獲頒「衛生福利部志願績優全國績優志工金質獎」；蔡郁玲獲頒「衛生福利部志願績優全國績優志工銀質獎」；顏美麗獲頒「衛生福利部志願績優銅質獎」；葉金蘭獲頒「嘉義市志願服務獎勵銀質獎」；邱明堂、羅素真分別獲頒「嘉義市志願服務獎勵銅質獎」；張慧子獲頒「103年度嘉義市地方衛生績優人員」；陳靜萱獲頒「雲林縣衛生保健績優志工」；劉明福獲頒「雲林縣志願服務績優志工銅質獎」。

**高雄捐血中心：**鍾禮聰、謝耀進分別獲頒「高雄市政府志願服務金質徽章」；洪謝月英、張敦霞、陳淑美、王迎、蔣智明、張耀華等分別獲頒「高雄市政府志願服務銀質徽章」；蘇美香、吳美校、葉世賢、林秀琴、王修滿等分別獲頒「高雄市政府志願服務銅質徽章」。

## 行動服務再升級

本會官方網站及「i-Blood 就是愛捐血」網站架設至今，已成為捐血人最常使用的查詢工具之一。不僅可以查詢各地缺血情形、各地捐血活動及地點、疾病感染危險區、藥物及手術的限制等等實用訊息；也提供醫事人員專區，針對與醫院端的共享訊息提供一個平台可查閱。官方網站自民國100改版以來，已突破800萬瀏覽人次；而愛捐血網站自99年架站以來，也已突破350萬瀏覽人次。

各捐血中心並都設有FB專頁，以更活潑又快速的方式，傳遞各項活動訊息給民眾；在社群時代當道的現代，是更便利的平台。

隨著智慧型手機、平板電腦、及各類訊息數位化的行動趨勢促使之下，各類行動工具漸漸成為個人化媒體媒介；符合各類行動需求的網路平台，就勢必成為主流。為此，本會於12月開始建置響應式網頁（RWD=Responsive Web Design）。未來，民眾無論使用何種行動工具聯網，都可以自動轉換最適應的網頁介面，對於查詢網站上任何訊息，將更為方便易讀；建置工程預計104年3月可上線。

## Good to Have You—40th Anniversary of Blood Donation

2014 marked the 40th anniversary of our blood donation services. Starting from the January, Blood Donor Month, of that year, we used the "40 years of love; it's good to have you with us" theme as our promotional slogan. The press conference for the blood donation month was held on December 31st, 2013, where Miss Yu-Chiu Chen with O-Negative blood group and Miss Li-Chin Chang with B para-Bombay blood group were invited to share their experiences. It generated considerable resonance on the internet. Mr. Hui-Hsiung Wang, a 204-time donor that has reached the upper age limit of donation, was also invited. Although no longer able to donate blood, he joined Taichung Blood Center's volunteer team, which he considers a great honor, and continues to assist in the promotion of blood donation in order to save lives. During the press conference Mr. Hui-Hsiung Wang passed down the spirit of "blood donation with love" to the next generation, Mr. Yong-Chang Chen, he also appealed for more young people to join the ranks of blood donation to save lives.

To extend the theme of anniversary and show gratitude, our Foundation held a "40 years of love; it's good to have you with us—40th anniversary of Taiwan's blood transfusion services " press conference at 2 p.m. on April 18th, 2014 at Eslite Bookstore Dunnan branch to show a new promotional film. We invited the film's actors and actresses, Mr. Chiu-Hong Shen, Miss Jia-Chen Yu, Mr. De-Ying Hsu and Miss Yu-Chen Chang to the event and share their most sincere stories with the public. Furthermore, Wei-Nian Huang, who was the little girl in the "I don't know you, but I thank you" poster and is now grown, also came to the event. The 40th anniversary ceremony opened with a welcoming and warm press conference.

During the April 19th celebration, we chose the

square in front of "Taipei Chongshan Hall", the starting place of the blood transfusion services 40 years ago and a place with special commemorative significance, to hold the "40 years of love; it's good to have you with us" celebration. During the celebration, we praised donors, schools, communities, enterprises and special contributors who have been enthusiastic about blood donation over the years. In addition to the special invitation of the Secretary of the Interior Wei-Ren Chen and the Minister of Health and Welfare Wen-Da Chiu to grant the awards, the famous movie star Uncle Yueh Sun and Miss Shu-Li Chen also came to the event to share their experiences of being a life-time blood donation volunteer. The celebration also incorporated Taipei Blood Center's annual awards for 2013 to praise the blood donors and groups of the year. All the passionate blood donors gathered to spend this day in history together.

## Safe Blood for Saving Mothers

On June 14th of every year, the world celebrates "World Blood Donor Day" together and blood donation campaigns are held throughout the world to express gratitude to all donors for their silent contributions. The theme for 2014 was "Safe Blood for Saving Mothers". With regards to this subject, the World Health Organization (WHO) appealed to all countries that in addition to a "medical blood supply provided 100% by voluntary blood donors", a timely supply of safe blood and blood products are required for pregnant women to reduce maternal mortality. WHO also pointed out that, worldwide, about 800 women die from severe hemorrhage during or shortly after childbirth every day. Therefore, obtaining safe and sufficient blood and blood preparation to adequately and properly handle the issue of blood transfusion is still a big challenge in many countries around the world.

To celebrate World Blood Donor Day, the press

conference was held on June 13th and two mother donors who suffered postpartum hemorrhage were invited to share both their stories of being helped and saving others. Hui-Jing Lin is a single mother and 20 years ago, she was still driving a taxi when she was about to give birth. Suddenly she suffered labor pains and her amniotic sac broke, and her passenger drove her immediately to the hospital. Ms. Lin suffered massive postpartum hemorrhaging, and the Kaohsiung Blood Center urgently transfused blood and saved her and her daughter. In order to thank the donor's selfless dedication, Ms. Lin and her two daughters also joined the ranks of blood donation to save lives and became a genuine blood donating family.

Another woman, Pey-Ya Cheng, began donating blood during her university days, thus learning that she has a rare blood type. Since then, she has continued donating blood to this day. In early May, when she was in Taipei Municipal Maternal and Children's Hospital giving birth to her second child, she suddenly had a massive postpartum hemorrhage. After the Taipei Blood Center transfused six units of blood in real time to Ms. Cheng, she smoothly gave birth to her child. The attending doctor for Ms. Cheng at the Taipei Municipal Maternal and Children's

Hospital, Li-Wei Huang, was also invited to the press conference to describe the story of postpartum hemorrhaging and blood transfusion treatment process.

The definition of a rare blood type is a type of blood with a frequency lower than 1/1000, and it is considered "very rare" if lower than 1/10000. In recent years, our Foundation has been actively strengthening the archiving and preservation of rare blood types for urgent needs. If a medical institution has a patient who needs a blood transfusion, it should contact our local blood donation center or station as soon as possible. We provide a year-round 24-hour blood supply service, and we will try our best to prepare the blood products needed by injured patients.

### Enterprises and communities deliver the power of love

Business communities regularly support the blood donation services and actively organize various blood donation campaigns. This year, national associations, troops and medical institutions donated a total of 704,171 bags (250 ml per unit) of blood, accounting for 27.96% of the total blood donated. Details of their donations are listed in the following table:

Center Unit	Taipei Blood Center	Hsinchu Blood Center	Taichung Blood Center	Tainan Blood Center	Kaohsiung Blood Center	Hualian Blood Center	Total	%
<b>The Lions Club</b>	138,763	73,008	125,714	19,920	11,659	13,133	382,197	54.28%
<b>The Kiwanis</b>	27,917	14,972	63,437	4,655	2,297	2,626	115,904	16.46%
<b>The Armed Forces</b>	9,488	9,991	11,597	23,490	17,082	6,125	77,773	11.04%
<b>Buddha's Light International Association, R.O.C.</b>	18,513	8,445	14,427	5,977	12,675	1,769	61,806	8.78%
<b>The Rotary Club</b>	11,380	3,369	7,139	11,725	17,238	3,951	54,802	7.78%
<b>Medical Care Institutions</b>	1,765	212	4,139	3,181	1,270	1,122	11,689	1.66%
<b>Total</b>	207,826	109,997	226,453	68,948	62,221	28,726	704,171	100%



In 2014, enterprises and organizations also regularly organized large national blood donation activities to benefit patients. These national blood donation activities are as follows (listed by date):

1. Taiwan High Speed Rail Corporation: 3 blood drives were held at Taipei (Nangang headquarters), Taichung and Kaohsiung from December 5th, 2013 to January 6th, 2014, and 436 bags of blood were collected.
2. Tasty Steak House: The "2014 One Million Passionate Young People's Recruitment" activities were held from January 24th to 26th and June 14th to 30th, and a total of 63,503 bags of blood was collected.
3. Shin Kong Group: 12 drives of the "Blood Donation with Passion" campaign were held from February 7th to 12th, and a total of 1,531 bags of blood was received collected.
4. CSC Financial Group: 6 drives of the "Rally of Love and Delivery of Happiness" activity were held from February 7th to March 31st, and a total of 809 bags of blood was collected.
5. Mobilization of the four types of professionals (accountants, lawyers, doctors, architects): 10 drives of the second "Professionals' Blood Donation with Love" were held on February 14th, and a total of 955 bags of blood was collected.
6. Chunghwa Post Co.: The "Warm Blood in Cold Winter, Postal Life Insurance Blood Donation Month" activity held 232 drives from February 21st to March 20th, and a total of 31,815 bags of blood was collected.
7. Junior Chamber International of the Republic of China: Thirty drives of the "Junior Chamber International's Summoning for Blood Donation to Save Lives" campaign were held across the country, and a total of 5,249 bags of blood was collected.
8. Nan Shan Life Insurance Charitable Foundation: The "2014 Nan Shan Summoning for Blood Donation" held 96 drives from May 3rd to August 29th, and a total of 12,835 bags of blood was collected.
9. Cathay Charity Foundation: 90 drives of the "2014 Summer Blood Donation" were held from June 1st to September 6th, and a total of 17,232 bags of blood was collected.
10. Conscription Department of the Ministry of the Interior: To encourage substitute civilian servicemen to enthusiastically donate blood, the "Blood Donation Season for substitute civilian servicemen" campaign was held from June 1st to September 30th, and a total of 19,148 bags of blood was collected.
11. Public Radio System (PRS): 10 drives of the nationally synchronized "Love on the Air Blood Donation" campaign were held from June 3rd to 17th, and a total of 1,546 bags of blood was collected.
12. Fubon Charity Foundation: The "Immediate Donation of Blood" campaign held 26 drives from July 8th to August 27th, and a total of 4,397 bags of blood was collected.
13. HOTA Motor Co., Ltd.: The "2014 HOTA's National Blood Donation Month" activity held 84 drives from August 1st to September 4th, and a total of 6,059 bags of blood was collected.
14. Chinatrust Life Insurance: 11 drives of the "Blood

Donation with Enthusiasm to Help Others" campaign were held from September 18th to October 1st, and a total of 717 bags of blood was collected.

15. Feng Chia University's Alumni Association: 19 drives of the "2014 National Alumni's Synchronized Blood Donation" campaign were held from November 1st to 22nd, and a total of 2,625 bags of blood was collected.

### Returning the favor with money and efforts

Associations, enterprises and the public not only participated in various blood donation activities, but also enthusiastically donated various supplies. This year, the blood centers received 6 blood collecting buses, 5 blood transportation vans, 1 administrative publicity car, and 174,694 empty blood bags. Further details are listed in the following table:

Item Center	Empty blood bags	Blood collecting bus	Blood transportation van	Administrative publicity car
Taipei Blood Center	89,239	1	1	0
Hsinchu Blood Center	0	4	1	0
Taichung Blood Center	53,389	0	1	0
Tainan Blood Center	8,998	0	0	0
Kaohsiung Blood Center	6,607	0	2	0
Hualien Blood Center	16,461	1	0	1
Total	174,694	6	5	1

### Praise of good performance makes love shine

To thank blood donors for their enthusiasm, the blood center in each jurisdiction holds the "Blood Donation Merit Recognition Assembly" every year. In the 2013 annual assembly, 146 schools were praised for their blood donation merit and awarded

the certificate of merit by the Ministry of Education; 318 organizations and institutions were awarded the certificate of merit by the Ministry of the Interior; and 33 army units were awarded the certificate of merit by the Department of Defense. Another 107 units or individuals were awarded the Foundation's certificate of special contribution.

Regarding personal awards, 6,358 people donated more than 100 units of whole blood each; 5,478 people donated more than 100 units of apheresis blood, and 217 of them even donated more than 1,000 units each. Furthermore, the number of people who donated more than 500 units (inclusive) of apheresis blood, men who donated more than 150 units of blood (inclusive), and women who donated more than 100 units (inclusive) of blood totaled 577 (318 whole blood donors, and 259 apheresis donors). In addition to the certificate of merit by the Ministry of Health and Welfare, they

were also awarded honor medals by the Director of Chinese Blood Donation Association

The annual merit donor representatives' audience with the President was held on January 8th. The 33 awarded blood donor representatives were accompanied by our Foundation's Chairman, Jin-Chuan Yeh, and CEO, Sheng-Tang Wei, to have audience with the President.

### Donor satisfaction survey

Donor satisfaction survey was conducted from November 1st to November 30th, 2014. The surveyed objects were qualified donors who were 17 ~ 24 years old so that young people's motives and perception of blood donation could be understood. Approximately 10000 questionnaires were answered and returned.

According to a statistical analysis of the surveys, the main conclusions are as follows: (1) An important consideration for blood donation intention is the convenience of the location; up to 48.3% of the blood donors think that the convenience of blood donation location will affect a donor's intention, followed by the influence of classmates or colleagues (36.1%). (2) Regarding the perception of ability to donate blood, donors who answered all questions correctly accounted for 37.2%; regarding the perception of inability to donate blood, donors who answered all questions correctly accounted for 17%. The results are low; women's perception of blood donation is better than that of men, college students' perception of blood donation is better than senior high school students, and repeat donors' perception of blood donation is better than first-time donors. (3) Only 16.1% of donors have visited the "Taiwan Blood Foundation" or "Love Blood Donation" (i-Blood) website; among the objects of this survey, the first-time donors' ratio was 48.7%; therefore, donors are generally unfamiliar with the Foundation's website. (4) Among the four items of donors' satisfaction, in addition to "waiting time", of which the satisfaction ratio was about 90%, the satisfaction ratio of the remaining three ("interview personnel's service attitude and skill", "blood collecting personnel's service attitude and needling techniques" and "whether the personnel took the initiative to inform donors about the donation process and the matters to be noted before and after the process") were all higher than 95%. This shows that the donors are positive about the quality of the blood centers' four services.

### International exchange of views to gain new knowledge

We actively participates in various international conferences to obtain new knowledge, since gaining important references for improvement by exchanging views with other countries is also an important

channel for furthering the understanding of the current international status. In 2014, the international conferences in which the Foundation participated include:

1. The 33rd session of the International Society of Blood Transfusion (ISBT) meeting was held in Seoul, South Korea from June 1st to 5th. The team was led by Director Sheng-Tang Wei, and team members included Tainan Blood Center's Director Guang-Chao Tsai, Hualian Blood Center's Doctor Li-Ling Lin, Taipei Blood Center's Technology Supervisor Hsiao-Fen Chen, Hsinchu Blood Center's Technology devisoin chief Ting-Ting Yang and Taichung Blood Center's Technology devisoin chief Hsuan-Hui Wang.
2. In 2014, the annual international conference of the American Association of Blood Banks (AABB) was held in Philadelphia, Pennsylvania from October 25th to 28th. The Foundation's representatives were led by the Research Department's Director Wei-Ren Cheng, and other team members included Taichung Blood Center's Director Chi-Ling Lin and Taipei Blood Center's Banchiao Station Chief Guan-Hsiao Lin.
3. The first Asia Pacific Blood Network (APBN) conference was held in 2013 in Seoul, South Korea from May 29th to 30th, and the second conference was held in Beijing from November 14th to 16th of that same year. CEO Sheng-Tang Wei attended both conferences on behalf of the Foundation.
4. The "Sixteenth Session of the South Central Area Blood Transfusion Academic Exchanges and International Occult Hepatitis B Infection (OBI) Symposium" hosted by Guangzhou Blood Center and Southern Medical University was held from October 8th to 12th, and the Foundation's Public

Relations Director Ping Tsong was invited to lecture on "Blood donor recruitment".

### Appointment with young people

To understand the perception of blood donation among 17 to 24 year olds and what types of activities blood centers can offer to attract young people to participate in blood donation to serve as an important reference for future promotion of regular blood donation by young people, "An Appointment with Ching-Chuan Yeh" youth blood donation forum was held on November 21st; 25 young people were invited to participate. The forum progressed smoothly, and the participants were quite eager to voice their opinions. It not only helped us to better understand the young people's thoughts, but also gave us a lot of different ideas.

Many important points were concluded from the Forum: education and promotion can be more solid, mobile instruments can be more extensively used, laboratory test reports can be easier to understand, advertisements and publicity can be more attractive, gifts can be exchanged across regions, subsidies can be considered for school communities, short movies can be shot to discuss topics, locations and schedules for blood donation can be more convenient, biscuits and drinks can be more diversified, and the significance of blood donation can be further elevated.

### Caring volunteers improve service quality

Our blood centers are strengthening our advocacy and service to blood donors. Blood donation volunteers, in addition to regularly participating in blood donation, assist in providing services. The awards won by blood center volunteers this year are as follows:

**Hsinchu Blood Center:** Chiu-Hua Tseng, Su-Lan Liao and Yue-Yuan Tang were awarded the "Hsinchu

County Volunteer Service Gold Medal"; Jin-Huan Ding was awarded the "Hsinchu County Volunteer Service Silver Medal"; and Min-Nan Wu, Ching-Guo Wu, Guo-Bin Huang and Jia-Hui Liu were awarded the "Taoyuan County Health Care Volunteer Bronze Medal".

**Taichung Blood Center:** Taichung Blood Center's volunteer team leader Rong-Chin Li won the "Taichung Health Bureau 2014 Excellent Health Care Volunteer Orchid Award".

**Tainan Blood Center:** Tsai-Mei Chen was awarded the "Ministry of Health and Welfare Excellent National Volunteer Gold Medal"; Yu-Ling Tsai was awarded the "Ministry of Health and Welfare Excellent National Volunteer Silver Medal"; Mei-Li Yan was awarded the "Ministry of Health and Welfare Excellent Volunteer Bronze Medal"; Jin-Lan The was awarded the "Chiayi City Volunteer Service Award Silver Medal"; Ming-Tang Chiu and Su-Chen Luo were awarded the "Chiayi City Volunteer Service Award Bronze Medal"; Hui-Chi Chang was named a "2014 Annual Chiayi City's Local Health Excellent Personnel"; Jing-Hsuan Chen was named a "Yunlin County Health Care Excellent Volunteer"; and Ming-Fu Liu was awarded the "Yunlin County Volunteer Service Excellent Volunteer Bronze Medal".

**Kaohsiung Blood Center:** Li-Tsong Chong and Yao-Jin Hsieh were awarded the "Kaohsiung City Volunteer Service Gold Badge"; Yue-Ying Hong Hsieh, Dun-Hsia Chang, Shu-Mei Chen, Ying Wang, Chi-Ming Jiang and Yao-Hua Chang were awarded the "Kaohsiung City Volunteer Service Silver Badge"; and Mei-Hsiang Su, Mei-Hsiao Wu, Shi-Hsian Wei, Hsiu-Chin Lin and Hsiu-Man Wang were awarded the "Kaohsiung City Volunteer Service Bronze Badge".

### Upgrading service

Since the setup of our official website "i-Blood –

"I just love blood donation", the site has become one of the most commonly used tool for donors' queries. On the website, people can search locations with blood shortages, blood donation activities and places, disease infection risk zones, medicine and operation restrictions and other practical information. The website also has a medical personnel area that serves as a platform for sharing information among hospitals. The number of viewers since the revision of the official website in 2011 has exceeded 8 million, and the number of viewers of the i-Blood website has exceeded 3.5 million since its setup in 2010.

Each blood center has its own Facebook fan club so that it can convey activity information to the people in a quick and fun way. The prevailing internet-

community society makes this a very convenient platform.

With the mobile trend of smart phones, tablets and various digitized information, all kinds of mobile devices have gradually become personalized media carriers, and internet platforms that meet the needs of all types of mobile devices will become the mainstream. To this end, we started building a responsive web design in December. In the future, no matter what mobile device is used to surf the web, our site will be automatically converted to the most suitable web interface. This will make message queries on the website more convenient and easier to read. This project is expected to go online in March 2015.

### 個資保護 全民共識

個人資料保護法上路之後，全民對保護個人權益的意識高抬，企業團體在蒐集處理利用客戶及員工個資時都更加嚴謹。本會在個資風險評估方面，各捐血中心於103年度重新檢視各項資訊資產之弱點、所面臨之威脅、及對組織之衝擊進行評估，以量化指標計算其風險等級，並將無法接受之風險以具體的改善措施降低其風險值，以確保本會資訊資產之安全。

為使個資管理制度落實到每位員工的日常作業中，透過與各捐血中心視訊會議討論，全面檢視現有標準作業程序，增修了38份個資保護及資訊安全相關標準作業文件。在全員個資意識提升方面，各捐血中心定期邀請專家學者分享案例，員工自行於網路上進行個資課程及評量，期使全員有正確觀念。於103年度召開2次個資管理委員會，探討個資推動成效，以確保能符合ISO 27001及BS 10012之精神，保障捐血人及員工之權益。

### 網路應用 無遠弗屆

近年來社群網站及聊天軟體蓬勃發展，提供免費文字、通訊與視訊服務，智慧型手機與網路的使用已是全民運動。本會為提升捐血人服務，在各捐血站、捐血室、捐血車均已全面提供捐血人上網的WiFi，捐血人於捐血等候區可無限瀏覽網路，也可

於捐血點打卡並將捐血救人英姿美照熱騰騰的發布於社群網站分享。

在網路安全方面，不僅對於捐血人網路查詢的網頁程式進行掃描，並修補弱點以提升其安全性，也對整體網路定期進行弱點偵測，未發現異常之漏洞。建置了視訊會議系統之後，網路頻寬使用大幅增加，也因此適時提升網路頻寬與調整架構，期使讓內外部之網路流量更為順暢。

### 血液管理資訊系統更新

大數據（Big Data）時代的來臨為各企業帶來無限商機，資料庫歷年來的大量資料若能進行系統性的分析與統計應用，將更明確了解捐血族群的特性，有助於提升捐血人服務與未來之發展方向；有鑒於此，擁有自主性高的客製化應用系統軟體系統是未來的主流。本會血液管理資訊系統經過近年來不斷的探討，已提出適合作業需求之建議書徵求文件；無論在捐血人服務、內部作業流程的改善、血液安全與品質控管，及未來發展方向，均有具體的考量，新的血液管理資訊系統將在近期內順利發包進行系統更新。

## Personal data protection is a priority for everyone

After the issuance of the Personal Data Protection Act, awareness regarding protecting individual rights has greatly risen, and enterprises are now more rigorous in the collection, processing and utilization of both customer and employee data. The Foundation evaluated its personal data risk in 2014, each blood center re-examined the weakness of its information assets, potential threats, and assessed the related impacts on the organization with quantitative indicators that show the level of risk. Concrete improvement measures were proposed for any unacceptable risks found in order to reduce the risk and ensure the safety of the Foundation's information assets.

To incorporate the personal data management system into each employee's daily work, the Foundation comprehensively reviewed the existing standard operating procedures with the blood centers via video conferences; 38 documents of personal data protection and information security related standard operations were amended. Regarding the enhancement of employees' personal data consciousness, the blood centers regularly invite experts and scholars to share real-life cases, and all employees have started taking personal data courses on the internet and make independent assessments to better understand correct concepts. In 2014, two meetings were held by the personal data management committee to evaluate the effectiveness of personal data awareness promotion in order to compliance with ISO 27001 and BS 10012, and verify that the rights and benefits of donors and employees are being protected.

## Borderless network application

In recent years, due to the flourishing of community websites and chat software, the provision of free text, communication and video services, the

use of smart phones and the internet is getting wider. To enhance blood donor services, the Foundation provides donors with Wi-Fi in each blood donation site. Donors can browse the internet and even share their blood donation photos on community websites while in the waiting area.

With regards to internet security, the Foundation not only scans the web pages, but also repair weaknesses in order to enhance the information system security. Furthermore, it regularly checks the overall network for vulnerability and loopholes. Since our video conference system was established, network bandwidth usage increased significantly, thus the network bandwidth and adjustments to the framework were upgraded to make both internal and external networks flow more smoothly.

## The blood management system renovation

The enterprises have more opportunities in the big data era. If the large volume of data in the database over the years can be systematically analyzed and used in statistical applications, the characteristics of donor groups can be more clearly understood, which can contribute to improve donor services and future development. Therefore, having a customized application system software with high autonomy will become the main stream in the future. After continuous enhancing the functionalities of the blood management system, the Foundation has put forward a request for proposal for meeting the demands of operation. Which is considered donor services, the improvement of internal operation processes, blood safety, quality control and the direction of future development. The blood management system will be renovated in the near future.



# 財務處

Financial  
Department

經費收入：業務收入包含國血製劑及工本材料費收入；捐贈收入主要為捐血車或血液運送車之打造及血袋、點心、紀念品之捐贈；其餘為利息收入及其他收入，主要包括廠商賠償不良品貨款、研究用血收入及補助收入。

經費支出：業務費用主要為國血製劑相關費用、血袋費、檢驗試劑費、消耗費及捐血人紀念品等；研究發展費主要為人員培育、研究消耗器材藥品、品質研究費及圖書費等；管理費用主要為辦公費、修繕維護費、租金支出及雜支等；人事費用為員工薪餉及加班費；其餘費用為社會服務費、財產報廢損失及員工退撫準備金。

## 善用財務資源

經費結餘佔總收入3.25%，視財務狀況及董事會決議提撥適當金額至血液品質研究發展專戶，俾利本會執行提升血液品質及研究計畫。

## 強化財務管理

落實審查帳務、原始憑證及相關案由紀錄與表單，經費收支均依「經費管理及內部審核電子化作業」流程規範及標準作業程序進行；另於12月底實施資產盤點，委請會計師查核帳務並出具財務報告，經董事會審議後向主管機關衛福部申報。

**Revenue:** Business income includes the income from domestic blood preparation and material fee income; donation income comes mainly from blood donation vehicles or blood transportation vehicles, as well as donations of bags, snacks and gifts for donors; remaining income comes from interest and such other areas as manufacturers' compensation payments for defective products, blood research income and subsidies income.

**Expenditures:** Business expenses are mainly related to domestic blood preparation costs, blood bag fees, reagent fees, material fees and gifts for blood donors; research and development costs primarily consist of expenses for personnel training, equipment and consumption materials for research, quality research expenses and book expenses; management expenses are primarily office expenses, maintenance expenses, rental expenses and miscellaneous expenses; personnel expenses include employee pay and overtime; remaining expenses include social service expenses, property losses and employee pension reserves.

## Efficient use of financial resources

The balance of the year accounts for 3.25% of the total revenue; depending on the financial situation and the resolution of the board of directors, an adequate amount will be appropriated for the blood quality research and development account in order to implement the Foundation's blood quality and study improvement program.

## Enhancing financial management

To implement account review, the original vouchers, relevant case records and forms, and all expenditures are processed in accordance with the process and standard operating procedures in the "Electronic Operation of Expenditure Management and Internal Audit". Furthermore, a stocktake of assets was implemented at the end of December, and CPAs were commissioned to audit accounts and issue a financial report, which was reviewed by the board of directors and then submitted to the competent authority of the Health and Welfare Department.

# 行政處

## Administration Department

### 發揮組織功能

本會為醫療財團法人，董事會為監督管理核心，置董事13人及監察人1人，每一屆任期4年；第7屆董事任期自本年1月1日起至106年12月31日止，董事會監督輔導本會暨各捐血中心營運，本年於2月19日、5月21日、10月21日共召開3次會議。

董事長為督促本會業務之推展，經常召集各捐血中心及各處主管進行會商及溝通，本年1月28日、4月15日、5月14日、5月21日、6月17日、12月19日共召開擴大主管會報7次。

### 提升團隊品質

敦促各部門在職教育訓練課程，包括採血、供血、檢驗、成分、品保、公關企劃、財會、資訊、行政等，給予實際的工作訓練；適時邀請專家學者演講、訂購英文專業期刊，舉辦讀書會等，提升人員素質。

為鼓勵基層，定期選拔優良員工，辦理公開表揚，以激勵全體人員的向心力，增進團隊的服務熱忱。

### 強化集中採購業務

對於各單位因日常業務需要，數量較大且可通用之血袋、試劑、儀器、耗材等物品，均聯合各捐血中心辦理集中採購，能有效降低購置成本，並藉由倉儲管理系統，控制適當的效期及數量，提升使用效能。

### 新增自有作業場所

高雄捐血中心為因應業務發展需求，規劃興建屏東捐血站新址，本年度已完成主體結構工程，開始進行內部裝修等相關工程，預計104年上半年完工啟用。

### Hold organization meetings

The Foundation is a medical foundation; its board of directors is the supervising and managing body. The board has 13 directors and one supervisor, each with a term of four years. The 7th term, which is the current term, starts on January 1st, 2014 and ends December 31st, 2017. The board of directors supervises the operations of the Foundation and the blood donation centers. A total of three meetings were held in the past year, on February 19th, May 21st and October 21st.

To move the Foundation's business forward, the chairman may often call meetings with the blood donation centers and department supervisors for consultation and communication. In the past year, a total of seven expanded management meetings were held on January 28th, April 15th, May 14th, May 21st, June 17th and December 19th.

### Improve team quality

This department's tasks include encouraging the departments to implement in-service education and training courses for blood collection, blood supply, testing, composition, quality assurance, PR planning, finance and accounting, information and administration, as well as providing practical work training, inviting experts and scholars for lectures when required, ordering professional English journals and organizing reading clubs to improve the quality of personnel.

To encourage entry-level personnel, excellent staff members will be periodically selected to be publicly praised in order to enhance all the staff's loyalty and promote team spirit.

### Strengthen centralized procurement business

For large requirements related to commonly used blood bags, reagents, instruments and materials for business needs, centralized procurement is performed for all blood donation centers to effectively reduce purchase costs; through the warehouse management system, the validity period and quantity are properly controlled to improve the effectiveness of utilization.

### Add new self-owned work places

The construction of a new Pingtung blood donation station at the Kaohsiung blood donation center has been planned in order to meet the demands of business development. Construction of the main structure was completed this year and the interior decoration and other related constructions have started. It is expected to be completed and opened in the first half of 2015.

# 台北捐血中心

Taipei  
Blood Center

台北捐血中心成立於民國63年8月1日，業務範圍包括台北市、新北市、基隆市和福建省金門縣及連江縣，轄區人口約716萬人。捐血服務地點包括基隆和板橋2個捐血站，關渡、南海、新店、長春、三重、捷運台北站、市府和汐止8個捐血室，中和、土城、峨嵋、台大、公園、忠孝、新莊和新光站前8個固定捐血點以及16個巡迴捐血點，供血醫院達248家。

## 傳愛40 有你真好

捐血月活動主題為「傳愛40 有你真好」，為在農曆年前募集充足醫療用血，舉辦一連串的捐血宣導活動。

台北捐血中心統計捐血人星座及透過i-Blood網站舉辦「捐血星座大解碼」趣味投票活動，1月17日假峨嵋號捐血車舉辦「看見台灣 看見愛」—由星座看見台灣捐血之愛記者會。邀請天秤座捐血人訴說著他們以「捐血」愛台灣的故事，還有處女座捐血人分享她一步一腳印踏遍台灣捐血點的捐血救人的喜悅。

1月2～20日辦理7場「傳愛40接力賽」活動，由員工及志工總動員，還有血寶寶與時下最熱門的黃色小鴨於西門町及捷運站週邊的捐血點進行踩街

宣傳，呼籲天冷不忘捐血救人。

今年適逢台灣捐血事業成立40周年，為感謝捐血朋友及熱心社團長久以來對捐血運動的支持，舉辦「傳愛40 有你真好」大聲說活動，邀請民眾透過分貝機大聲疾呼「看見台灣看見愛，捐血救人一起來！」

## 捐血績優表揚

102年度捐血績優表揚大會與台灣捐血事業40周年慶祝會併辦，4月19日於中山堂廣場舉辦，表揚全血捐血1,495人、分離術捐血2,192人，學校38所、部隊5單位，機關、社團82單位和特殊貢獻5單位，感謝他們長久以來對捐血活動無怨無悔的奉獻。

## 安全血液挽救母親的生命

6月14日世界捐血人日主題是「安全血液挽救母親的生命」，6月13日於峨嵋號捐血車舉辦記者會及慶祝活動，邀請懷胎22週即將成為母親的Rh陰性血捐血人王小姐，談Rh陰性血的心路歷程及特殊血型生產的擔憂。另一位美女辣媽，定期捐血人郭小姐，帶著她可愛的女兒來分享自己的盲人母親捐血及用血的故事，希望這份報恩的精神延續下一代。

另外也安排「熱血小天使遊街」活動，透過小朋友天真可愛的聲音讚美母親的偉大，謝謝母親生、養育之恩；同時沿著熱鬧的西門町街頭邀請民眾捐血，呼籲「捐血救人」的重要。

同時於「台北捐血中心FB粉絲團」舉辦「熱血救人感謝母恩活動」，獲得網友熱烈響應，紛紛上傳與母親的合照及留言讚美母愛與捐血有關的話題。

### 校園宣導 捐血觀念向下扎根

因應年輕血源減少的情形，積極前往高中職和大專院校辦理捐血宣導共34場，傳達血液的重要性及捐血做好事的觀念。

### 企業傳愛 回饋社會

和泰汽車股份有限公司捐贈「新莊號」定點捐血車乙輛，新北市中和廣濟宮捐贈「廣濟號」血液運送車乙輛，熱心民眾及團體捐贈89,239個血袋。

### 個資保護 全體動員

1月1日起捐血或複檢的檢驗報告電子郵件增加「電子檔加密」，為提升服務品質修改電子郵件檢驗報告產生方式，調整為PDF檔案格式，以改善部分手持裝置無法讀取及特殊字無法顯示問題。

各捐血點均放置張貼「捐血者個人資料蒐集聲明書」，讓捐血人知悉其個人資料的相關權益，員工、志工也簽署了「個人資料蒐集聲明書」及「保密承諾書」。除安排全體員工個人資料與資訊安全訓練課程並辦理個資與資訊安全內稽人員教育訓練。

原先分離術捐血點有提供捐血人Wi-Fi免費上網服務，於年底全面提供，讓捐血人在等待捐血的時候可以使用此項服務。

### 自動化的血液檢驗作業

本中心同時負責台北、新竹及花蓮中心檢驗



台北捐血中心在614世界捐血人日舉辦「熱血小天使遊街活動」。



作業，每日檢驗作業量約2,000～2,500人次，全面採行自動化檢驗設備，包括：TECAN EVOlyser、Beckman Coulter PK7300、Beckman Coulter AU2700，檢驗結果以網路系統直接傳送至各中心，以避免資料轉換過程中異常事件發生。且為確認本中心之檢驗品質達到國際水準，每年皆參加國內外之精確度調查，包括：台灣醫檢學會、美國病理學會、澳洲國家血清實驗室。

本中心於98年5月成立血液諮詢實驗室，為協助國內醫療機構解決輸血醫學相關臨床問題，服務內容包括紅血球抗原抗體檢驗、輸血疑問之諮詢及提供醫療機構輸血安全相關議題的教育訓練，並因應國內醫院輸血需求，加強稀有血型捐血者的鑑定及資料建檔以滿足醫院所需。

為求血液成分製作標準化，減少人為操作誤差，提高血液成分利用效益，採購自動壓板機提高血液成分利用效益，103年3月購入Compomat G4自動壓板機10台，同年11月基金會亦採購6台LMB自動壓板機提供本中心使用。

加強減白血品推廣，為了讓符合適應症的病患能夠正確的使用減白血品，安排6場醫院講習，向醫師、專科護理師及血庫醫檢師等介紹減白血品的優點，期望逐步取代傳統床邊過濾減除白血球的方式。另外12月13～14日本中心於腎臟醫學會年會場外設攤推廣減白血品。

## 稽核訪查 品質保證

將國人血漿運往澳洲CSL血漿工廠製造血漿製品，提供國人使用，相關作業和血液品質均經澳洲政府醫藥品管理局審核。澳洲CSL血漿工廠1月16～17日派員至本中心進行定期查核。

全國認證基金會5月30日至本中心進行「醫學實驗室認證」監督評鑑。12月25～26日進行「醫學實驗室展延認證現場評鑑」。

食品藥物管理署6月23～27日至本中心進行「血漿原料製備作業PIC/S GMP後續查核」及「捐血機構訪查」。

## 健康捐血 安全用血

為提升血液品質、輸血安全及維護捐血人健康，持續加強醫院互動和衛教文宣，我們積極建立各項溝通管道，包括：

1. 參與醫院多場教育演講及每年1次血液供應座談會。
2. 愛滋病相關文宣品制定新版本，置放於各捐血點捐血人填表處。
3. 設計含高鐵食物及相關膽固醇含量之衛教單，提供血色素多次不足未能捐血之捐血人參考。
4. 提供捐血者避免乳糜血捐入的飲食建議。

Established on August 1, 1974, Taipei Blood Center serves the regions that include Taipei City, New Taipei City, Keelung City, Kinmen County and Lienchiang County, Fujian Province. The population within its jurisdiction is about 7.16 million people. Its blood donation spots include two blood donation stations, one each in Keelung and Banqiao, eight fixed blood donation rooms, located in Guandu, Nanhai, Xindian, Changchun, Sanchong, Taipei Metro Station, Taipei City Government, and Xizhi, eight fixed blood donation mobiles, which are located in Chunggho, Tucheng, Emei, National Taiwan University, 228 Memorial Park, Chungxiao, Xinzhuang, and Shin Kong Taipei Station, and 16 blood donation mobiles, all of which help to provide the blood for 248 hospitals.

### Good to Have You—40th Anniversary of Blood Donation

The theme of this blood donation month is "Good to Have You—40th Anniversary of Blood Donation," which includes a series of blood donation campaigns to collect sufficient blood for medical purposes before Chinese New Year.

Taipei Blood Center collects statistics regarding donors' zodiac signs, holding an interesting voting activity "Interpretation of Donors' Zodiac Signs" on the i-Blood site. On January 17, the "Let Taiwan see love"—Press Conference regarding seeing the love of Taiwan through zodiac signs was held on the Emei blood mobile. The Libra donors were invited to tell their stories about loving Taiwan by donating blood and Virgo donors shared their happiness about saving lives by donating blood step by step at blood donation spots around Taiwan.

Between January 2 and 20, seven "Relay Races for 40th Anniversary of Blood Donation" were held. All the staff and volunteers, as well as the Blood Baby and the most popular yellow duck, advocated blood

donation at Ximending and blood donation spots near the MRT station.

This is the 40th anniversary of the establishment of blood donation services in Taiwan. To thank the blood donors and society for their support, the "speak out" event for the "Good to Have You—40th Anniversary of Blood Donation" celebration was held, and the general public was invited to share the slogan "Let Taiwan see love. Let's donate blood and save lives!"

### Praising Excellent Blood Donation Services

The 2013 Praising Excellent Blood Donation Services and the celebration for the 40th anniversary of blood donation services in Taiwan were held together in the square of Zhongshan Hall on April 19 to praise 1,495 whole blood donors, 2,192 apheresis blood donors, 38 schools, 5 troops, 82 facilities and clubs, and five units with special contributions and thank them for their selfless devotion to blood donation.

### Safe Blood for Saving Mothers

The theme of World Blood Donor Day on June 14 was "Safe blood for saving mothers." On June 13, a press conference and celebratory events were held on the Emei blood mobile. Miss Wang, an expectant mother of 22 weeks, and Rh-negative blood donor, was invited to share her experiences with having Rh-negative blood and her concerns about giving birth with a special blood type. Another attending mother, Miss Guo, a regular donor, also brought her lovely daughter to share the story of her blind mother's donation and use of blood in the hope of extending the spirit of gratitude to the next generation.

Furthermore, the "Little Angel Parade" event praised mothers' greatness through the lovely voices of children, thanking mothers for giving birth to us and raising us. Along the bustling streets of Ximending, the importance of "saving lives by donating blood"

was emphasized to call on the general public to donate blood.

The "Say Thank You to Mothers" event held on the Taipei Blood Center Facebook fan page received an enthusiastic response. Many fans uploaded their photos with their mothers and left messages to praise motherly love and share stories of blood donation.

### **To Consolidate Blood Donation Ideas by Advocating on Campus**

To cope with the problem of the shortage of young blood, our center actively held 34 blood donation promotional events at senior high schools, vocational high schools, colleges, and universities to convey the importance of blood donation.

### **Corporations' Love and Feedback to Society**

Hotai Motor Corporation donated one fixed blood mobile "Xinzhuang", and Guangji Temple, Chungho donated one blood transport truck "Guangji". Enthusiastic people and groups have donated 89,239 blood bags.

### **Everyone Works for the Protection of Personal Data**

Since January 1, 2014, e-mails attached with an examination report on blood donation or second examination have been "encrypted". To promote service quality and solve the problem of undecodable words in mobile phones, the attachment is converted into a PDF file.

The "Statement of Collecting Donor's Personal Data" is posted in each blood donation spot so that donors can understand their rights regarding personal data. The staff and volunteers have all signed the "Statement of Collecting Personal Data" and the "Commitment of Confidentiality". In addition to training programs for personal data and information

safety, the staff also receives educational training regarding personal data and information safety audits.

Originally, only spots for apheresis blood donation were equipped with free Wi-Fi. Now, at the end of the year, all the blood donation spots are equipped with free Wi-Fi so that donors can access internet service while waiting to donate blood.

### **Automatic Blood Examination Procedure**

Our center is in charge of the examination procedure in Taipei, Hsinchu, and Hualien. About 2,000-2,500 people are examined every day by automatic examination devices, including TECAN EVOlyser, Beckman Coulter PK7300, and Beckman Coulter AU2700. The results of the examination are transmitted to each center via the internet to avoid abnormalities during data conversion. To ensure that examination quality achieves international standards, our center attends proficiency tests in Taiwan and abroad every year, including the Taiwan Society of Laboratory Medicine, College of American Pathologists, and National Serology Reference Laboratory in Australia.

In May 2009, our center established a blood reference laboratory to help solve clinical problems regarding blood transfusions for the medical facilities in Taiwan, including red blood cell antigen-antibody testing and blood transfusion consultations, as well as provide educational training regarding blood transfusion safety for medical facilities. To meet the needs for blood transfusion in hospitals in Taiwan, the Laboratory also stresses the identification of donors with rare blood types and the data documentation.

To standardize production of blood components, reduce human error, and enhance the efficiency of blood components, our center purchased an automatic pressing machine. In March 2014, our center purchased

ten Compomat G4 automatic pressing machines and in November of the same year, our center purchased six LMB automatic pressing machines.

To promote leukoreduction and help patients with such indications to correctly use leukoreduction products, our center held six lectures at the hospital to introduce the advantages of leukoreduction to the doctors, nurses, and medical technologists of the blood bank in the hope of gradually replacing traditional bedside leukocyte reduction. Furthermore, on December 13-14, our center promoted leukoreduction products outside the Annual Conference of the Taiwan Society of Nephrology.

### Quality Guaranteed after Auditing and Inspection

The plasma was delivered to CSL, Australia to be manufactured into plasma products for people in Taiwan. The production procedure and blood quality have been examined by the Therapeutic Goods Administration, Australian Government. CSL appointed auditors to our center on January 16-17.

Taiwan's Accreditation Foundation supervised and evaluated the "medical laboratory accreditation" at our center on May 30. On December 25-26, the "Evaluation of Accreditation for Medical Laboratory Extension" was performed.

On June 23-27, the Food and Drug Administration conducted "PIC/GMP later inspection of plasma material preparation and production" and "inspection of blood donation facilities" at our center.

### Healthy Blood Donation and Safe Blood Use

To enhance blood quality and blood transfusion safety, maintain donors' health and continue to emphasize interaction with hospitals and health education promotions, our center has actively established a variety of communication methods, including:

1. Taking part in educational lectures at the hospital and blood supply forum once a year.
2. Making new versions of brochures regarding AIDS and placing them in the area where donors fill out forms at the blood donation spots.
3. Designing health education notices regarding foods rich with iron and their amount of cholesterol as a reference for donors who fail to donate blood because of low hemoglobin.
4. Providing dietary suggestions for donors to avoid donating chylomicronemia.

# 新竹捐血中心

Hsinchu  
Blood Center

## 企業社團 回饋社會

為了提升捐供血服務，今年新竹捐血中心計畫募集大型捐血車及血液運送車。瑞唐機構、瑞翊建設董事長羅福來，秉持回饋社會的心，讓行善做公益發揮更大的意義；在1月25日捐贈了「瑞唐1號」多媒體捐血車1輛以及血液運送車1輛予新竹捐血中心，提供桃竹苗地區的捐血人更貼心與便利的捐血服務。

國際扶輪3500地區，發動3千多位社友，募得資金打造4輛大型多媒體捐血車及1輛血液運送車，捐贈給新竹捐血中心，以便服務廣大捐血民眾；並於4月12日假新竹縣體育館舉行啟用典禮。台灣血液基金會董事長葉金川致贈「限量生肖血寶組」，感謝國際扶輪3500地區社友們熱心熱血回饋社會，並開創國內資源整合、一次捐贈最多輛捐血車的紀錄！

桃竹苗地區總人口數達360萬人，新竹捐血中心設有固定捐血地點，包括竹北愛心樓、桃園捐血站、苗栗捐血站、西大捐血室、中壢捐血室、長庚捐血室、及頭份捐血室等。今年由瑞唐建設、瑞翊建設以及國際扶輪3500地區所慨捐的5輛大型多媒體捐血車及2輛血液運送車，將能更密集安排鄉鎮巡迴捐血活動，為更多民眾服務。

## 捐血月、世界捐血人日

歡慶聖誕、迎接馬年，每年農曆年前1個月訂定為捐血月。新竹捐血中心於12月21日於新竹東門城捐血亭辦理「捐血愛加倍 馬年馬上拍」活動，為提升農曆年前捐血量，邀請雙胞胎、好朋友、生肖屬馬、名字有馬的熱血好友，2人同行愛心捐血「加倍奉獻」共同捐血救人。可愛捐血幸運馬首度於新竹東門城捐血亭現身，完成捐血後，即可騎上馬背與幸運馬合影，馬上獲得「個人專屬珍藏限量血寶照片」。雙胞胎姊妹許珈瑋、許珈寧為12月壽星，2人首次捐血，愛心加倍奉獻，當作最有意義的生日紀念，透過有趣的活動，宣導捐血公益。

6月14日是世界捐血人日，今年主題為「安全的血液挽救母親的生命」，為感謝捐血朋友及時為孕產婦提供安全血液，特地邀請到熱血媽咪、母子、母女檔共同挽袖，廣受喜愛的捐血猴寶、舞力全開與民眾歡樂互動，熱血媽咪林瑞華，多年前生產發生嚴重血崩，感念無名英雄捐血救回她一命，特地偕同先生，夫妻倆共同挽袖；捐血母子檔鄭鈴齡、彭煜然同為高次數捐血人，堪稱最熱血的母子檔；還有14位空軍弟兄相約捐血，響應世界捐血人日，為軍旅生涯留下難忘的回憶，103年世界捐血人日，透過溫馨互動，宣揚充足醫療用血。

## 績優表揚 無私奉獻

為了感謝捐血人的無償奉獻，新竹捐血中心5月6日於新竹國賓大飯店舉辦「102年度捐血績優表揚大會」。廣受喜愛的捐血猴寶以可愛造型現身迎賓，邀請新竹市長許明財、新竹縣長邱鏡淳等貴賓頒贈捐血感謝狀，表揚捐血人的無私奉獻。本次接受表揚的捐血人包括桃竹苗地區合計1,643人，受表揚團體有25個社團與企業、10所學校、及陸軍司令部等4個國軍單位。

根據統計，102年桃竹苗捐血人口中，勞工朋友佔33.4%居首，更居全台之冠；台北、台中、台南、高雄與花蓮捐血中心勞工比率分別為14.6%、24.1%、22.2%、16.2%、10.2%。「熱心捐血的無名英雄，就是我們前進的動力」，本次表揚大會，各行各業愛心勞工朋友齊聚一堂，有熱血總舖師、郵差、保全與維修師，各自穿著引以為傲的工作服參與盛會，接受表揚與肯定。

10月30日舉辦「捐血感恩愛心茶會」，21位來自桃竹苗65歲以上的捐血好朋友齊聚、分享彼此捐血經驗，希望將自己的捐血經驗傳承給下一代年輕人，中心致贈「血寶萬用吊牌」，感謝捐血朋友長期的無私奉獻。

## 捐血紀念 紀念捐血

為了感謝捐血人的愛心奉獻、鼓勵使用電子郵件寄發「捐血檢驗報告」，只要符合2年捐血4次條件之捐血人，在生日前夕，即可收到本中心寄發的生日賀卡，只要列印卡片前往桃竹苗各捐血室，即可領取溫馨生日禮乙份；生日禮品均由企業社團無償贊助，與新竹捐血中心共同推廣捐血公益。捐血人生日當天捐血，由護理長及採血同

仁獻唱生日快樂歌，獻上溫馨祝福，藉此建立良好互動。

## 捐供血服務 品質再提升

為了提升供血服務品質，8月6日於苗栗捐血站辦理「103年苗栗地區血液供應座談會」，邀請大千醫院血液科主任黃明立，專題演講「減白血品臨床使用之經驗分享」，藉由臨床實務經驗，分享血液科病患輸用減白血品之實際成效。

11月6日辦理「103年捐血團體座談會」，邀請熱心公益、長期支持捐血的交通大學、陸軍六軍團、力品科技公司等20個團體蒞臨，分享辦理捐血活動的經驗，彼此互相交流學習，永續捐血公益。

為了提升輸血品質，11月25日新竹捐血中心醫師孟繁蕃於台北榮民總醫院新竹分院，專題演講「臨床輸血安全」，院長游漢欽暨30位臨床用血醫師、醫技醫護人員共同參與，討論各項血品、輸血反應、緊急輸血、紅血球抗原陰性與HLA病患之輸血等交流互動。

12月12日、26日邀請台灣服務禮儀品質管理協會執行長黃璦婷，專題演講「六心級服務」，透過互動式演說，了解服務的最高品質，期許同仁提供每位捐血人最優質的服務。

為了鼓勵同仁與志工朋友提供捐血人更貼心的服務，自100年起辦理「服務讚」活動，包括捐血過程、捐血前後關懷與衛教服務等，由捐血人投票給捐血當日覺得服務良好的同仁，每季於FB上公開表揚，透過同仁間互相提醒，以及表揚的鼓勵，努力加強各項作業良好的品質與服務。



## Corporations and Clubs Make Contributions to Society

To enhance blood services, Hsinchu Blood Center planned to collect large blood mobiles and blood transport trucks this year. President of Ruitang Construction and Ruiyi Construction Luo Fu-lai realized his goal to make contributions to society by donating the "Ruitang No.1" multimedia bloodmobile and one blood transport truck to Hsinchu Blood Center on January 25 so that the donors in Taoyuan, Hsinchu, and Miaoli can all experience more comfortable and convenient blood donation services.

Rotary International District 3500 mobilized more than 3,000 members to donate funds for four large multimedia bloodmobiles and one blood transfusion truck to Hsinchu Blood Center for the benefit of a large number of donors. On April 12, the launching

ceremony was held at Hsinchu County Arena. The Chairman of Taiwan Blood Services Foundation, Ye Jin-chuan, gave a "limited edition Chinese zodiac blood baby set" to thank members of Rotary International District 3500 for their contributions to society, setting an unprecedented record of resource integration in Taiwan and the largest number of bloodmobiles donated.

The total population of Taoyuan, Hsinchu, and Miaoli is 3.6 million. Hsinchu Blood Center consists of the following fixed blood donations spots: Jhubei Aihsin Building, Taoyuan Blood Donation Station, Miaoli Blood Donation Station, Xida Blood Donation Site, Zhongli Blood Donation Site, Chang Gung Blood Donation Site, Toufen Blood Donation Site, etc. The five large multimedia bloodmobiles and two blood transport trucks donated by Ruitang Construction,



新竹捐血中心103年捐血月「捐血愛加倍 馬年馬上拍」活動，主任楊炳炘巧扮聖誕老公公與捐血雙胞胎、好朋友共同響應捐血救人。

While celebrating Christmas and welcoming the year of horse, one month before every Chinese New Year is Blood Donation Month. To increase the amount of blood donations, Hsinchu Blood Center held the "Double Blood Donation and Taking a Picture on a Horse" event at Dongmencheng Blood Donation Station.

Ruiyi Construction, and Rotary International District 3500 can serve even more people with more mobile blood donation events.

### Blood Donation Month, World Blood Donor Day

While celebrating Christmas and welcoming the year of horse, one month before every Chinese New Year is Blood Donation Month. To increase the amount of blood donations, Hsinchu Blood Center held the "Double Blood Donation and Taking a Picture on a Horse" event at Dongmencheng Blood Donation Station in Hsinchu on December 21, inviting twins, friends, those whose Chinese zodiac sign is a horse, and those whose name has the word "horse" in it to donate their blood together. Two donors together make "double contributions". The cute fortune horse showed up for the first time at Dongmencheng, Hsinchu. After the donors donated their blood, they could mount the horse and take a photo, a "limited edition photo of the blood baby". The twin sisters Xu Jia-wei and Xu Jia-ning, who were born in December, donated blood for the first time, making a double contribution. It is the most meaningful birthday memory for them. The Center successfully advocated blood donation through this interesting activity.

The theme of World Blood Donor Day on June 14 was "Safe blood for saving mothers". To thank donors for providing safe blood for pregnant women in time, the Center specially invited mother, mother and son, and mother and daughter donors. The popular Monkey donor danced happily with the general public. Many years ago, donor Lin Rui-hua, a mother, had severe postpartum hemorrhaging. To thank the nameless donor for saving her life, she and her husband decided to donate blood to save others as well. Mother and son donors Zheng Ling-ling and Peng Yu-ran both donate blood very frequently. Furthermore, 14 air crew members donated their blood together for World

Blood Donor Day, leaving an unforgettable memory for their military life. This year's World Blood Donor Day advocated sufficient blood for medical purposes through warm-hearted interaction.

### Praising Excellent Donors' Selfless Contributions

To thank donors for their selfless contributions, Hsinchu Blood Center held the 2013 Praising Excellent Donor Convention at Ambassador Hotel in Hsinchu on May 6. The popular Monkey donor showed up in a lovely costume. Hsinchu City Mayor Xu Ming-cai and Hsinchu County Executive Qiu Jing-chun, as well as other honorary guests, gave certificates of appreciation to donors for their selfless contributions. A total of 1,643 donors from Taoyuan, Hsinchu, and Miaoli, 25 clubs and corporations, 10 schools, and 4 institutions of the Armed Forces including Army Command Headquarter at this event.

According to statistics, among the donors from Taoyuan, Hsinchu, and Miaoli in 2013, 33.4% are laborers, the top in the region and in Taiwan. The proportions of laborers in Taipei, Taichung, Tainan, Kaohsiung, and Hualien Blood Centers are 14.6%, 24.1%, 22.2%, 16.2%, 10.2%, respectively. "Anonymous donors push us forward". This praising convention gathered people from all walks of life, including chefs, postmen, securities guards, and mechanics. They received the honor in the working uniform that they wear every day with pride.

The "Appreciation Tea Party" took place on October 30, where 21 donors over 65 years old from Taoyuan, Hsinchu, and Miaoli shared their experiences with blood donation, hoping to pass it down to the next generations. The Center gave an "all-purpose blood baby tag" to thank donors for their selfless contributions.

## **In Memory of Blood Donation**

To thank the donors for their contributions and encourage them to receive a "blood donation examination report" via e-mail, donors donating blood four times in two years receive a birthday card sent by the Center. The donor can take the printed card to receive a gift at the blood donation Site in Taoyuna, Hsinchu, or Miaoli. The gifts were sponsored by corporations and clubs for free. They promoted blood donation together with Hsinchu Blood Center. The head nurse and other staff would sing Happy Birthday to the donors who donated blood on their birthday and gave them the most heart-warming blessing.

## **Promoting the Quality of Blood Donation and Supply Services**

To enhance blood supply services, Miaoli Blood Donation Station held the 2014 Forum on Blood Supply in Miaoli on August 5. The Director of the Division of Hematology at Da Chien Hospital, Huang Ming-li, gave a keynote speech on "The Clinical Use of Leukoreduction apheresis platelets," sharing the actual effects of patients in the Division of Hematology's use of Leukoreduction products through his clinical experience.

On November 6, the Center held the 2014 Blood Donation Group Forum. Twenty groups that had supported blood donation for a long time, including National Chao Tung University, the 6th Corp Command, and Powerchip Technology Corporation, were invited to share their experiences regarding

holding blood donation activities. By learning and communicating with each other, blood donation services can be sustainably developed.

To enhance blood transfusion quality, doctor of Hsinchu Blood Center Meng Fan-fan gave a keynote speech on "Clinical Blood Transfusion Safety" at the Hsinchu Branch of Taipei Veterans General Hospital on November 25. Dean You Han-chin, 30 doctors, and medical laboratory staff discussed blood, transfusion reactions, emergency blood transfusion, blood transfusion of patients with negative antigen red blood cells and HLA, etc.

On December 12 and 26, CEO of Taiwan Service Proprieties Quality Management Association Huang Ai-ting was invited to give a speech on "Six-Heart Level Service", familiarizing the audience with top service quality through an interactive speech with the hopes that employees can provide the best service for each donor.

To encourage the staff and volunteers to provide more considerate services for donors, "Like service" Facebook campaign has been held since 2011. The donors can vote for the staff member that provides good services, including service during the process of blood donation, care before and after blood donation, health education, etc. Staff members with a lot of "likes" will be praised publically on Facebook each quarter so that the staff can remind each other to improve their quality and service.

# 台中捐血中心

Taichung  
Blood Center

台中捐血中心除了彰化及埔里兩捐血站外，另設有5個固定捐血點及50餘個巡迴捐血點。為了提供捐血人更舒適的環境，今年1月12日由聚合發建設所捐贈並全新打造的「聚合發號」捐血車，進駐新光三越定點捐血車原址，不但空間寬敞明亮，而且特別增設「雙體檢室」加速體檢作業的流程，縮短捐血人等候的時間，提昇服務的品質。

設置於民國83年7月5日，位於台中市南區興大路、國光路口中興大學旁的「興大捐血車」固定捐血點，因配合臺中市政府「綠川下游周邊環境改善延續工程」之興建，興大捐血車所在地原址將改建；故興大捐血車自103年9月1日起正式結束作業。為了推廣分離術捐血，供應足夠的分離術血小板，台中捐血中心也積極的在大里及豐原等地區找尋適當場所設置定點捐血室，以募集更多的分離術血小板。

由國際獅子會臺灣總會300-C2區03-04年會長聯誼會成員所組成的「台中縣人山人市愛心功德會」在今年5月31日捐贈大型捐血車1輛給台中捐血中心，捐贈儀式在曾經擔任國際獅子會臺灣總會總會長及國際獅子會臺灣總會300-C2區03-04年總監童瑞陽、以及新任台中市長林佳龍見證下，於霧峰臺灣省諮議會會館前廣場舉行，新的捐血車啟用將

可提供嶄新、舒適的環境給捐血人。

台中捐血中心轄區內醫療院所所需的血液成品，絕大部分皆由捐血中心之醫療用血液運送車以團體供血方式運送，以確保血液品質。103年將無償捐血募集的血液，包含成分血的供應量為909,930單位，供應給轄區內620餘家醫療院所，救助無數生命。10月18日麗明營造公司在該公司於夏綠地公園舉辦的「20周年慶感恩音樂會」中捐贈1輛冷凍冷藏血液運送車給台中捐血中心，這輛新的冷凍冷藏血液運送車有著嶄新的設計，車內區分為3個獨立空間，箱內維持在不同的溫度環境中，可分別存放血漿（零下20度C）、血小板（20～24度C）及紅血球（1～6度C）等不同的血品。目前台中捐血中心擁有的血液運送車計有7輛，有多輛均已達使用年限，藉由這輛新車的啟用，將更能提升血液品質及服務安全。

為了提升血液品質，採血課自8月26日起全面使用Hemo Quick血液搖盪器，成分課在11月開始測試10套LMB雙袋式自動血液成分壓取系統，未來將導入自動壓板作業。完成PICS/GMP後續查核暨捐血機構訪查，並於11月20日獲得認定符合PICS/GMP。為加強與醫院間之夥伴關係，技術組組長王萱慧7月11日至台灣輸血學會於中國醫藥大



學附設醫院舉辦之「103年度血庫工作人員在職訓練課程基礎班」報告Blood components: preparation, storage and transportation（含Leukoreduction），並宣導儲存前減除白血球製品之優點。11月1日林啟靈主任至埔里基督教醫院院內臨床醫學研討會演講，題目為：「儲存前減除白血球血品」。

為了讓年輕學子更瞭解捐血相關流程，將捐血觀念向下紮根，今年度分別有中山醫學大學醫學檢驗暨生物技術學系醫檢組學生、福科國中童軍社、育群美語等學校單位至中心參訪，不僅學習到各種捐血知識，也可將捐血觀念傳播出去。

服務品質提升也是持續進行的目標，今年服務品質教育訓練邀請台灣服務禮儀品質管理協會黃瓊婷執行長，主講：「創造，唯一不可取代的價值、六心級服務－更新心程式」；也邀請興誠服務品質管理訓練機構劉大慶經理主講：「說話美學－優質

溝通應對技巧」，期望能提升服務質量，帶來更優質的服務。

配合台中市政府衛生局分別於7月27日在勤美誠品綠園道前「就食藥您愛上我」衛教宣導列車健康嘉年華會活動、11月8日在台中市中友百貨前「毒品防制宣導活動」，以及12月13日在國立臺灣體育運動大學體育場前廣場舉辦的「世界愛滋病日宣導活動」中設攤宣導，讓更多民眾了解血液常識及血液安全的重要性。

善用大眾傳播媒體宣導推廣捐血觀念，上半年度與「hit FM」電台合作，下半年度與「全國廣播」合作；利用廣播媒體以整點對時、20秒輪播廣告、節目專訪、專題單元等多種形式，於暑假及捐血月等血源較短缺期間強力播送宣傳，宣導內容以加強吸引17～24歲年輕人捐血為主軸，增加台中捐血中心於廣播媒體露出頻率。另外也與警察



聚合發建設股份有限公司捐贈新光三越定點捐血車，在臺中市政府社會局副局長廖素玲（左2）見證下正式啟用。

廣播電台台中台合作，每季固定舉辦捐血活動，號召收聽警廣之用路人傳播愛心。其他還包括了積極與地區有線電視業者聯繫，利用跑馬燈、插播圖卡方式宣傳捐血活動或缺血時期號召民眾踴躍捐血。

持續與朝陽科技大學傳播藝術系以產學合作形式執行捐血行銷企劃案，今年配合捐血事業成立40周年，以此為活動主軸，徵選感人的熱血故事，並以徵選「動漫」型式海報，吸引年輕人關注，提升年輕族群捐血量。藉此能更加強與青年學子合作，讓捐血行銷更多樣化與年輕化，提高年輕族群捐血意願，並募集到更多優秀的設計，運用於網路行銷等各種用途上。除了產學合作外，並與該校「服務學習」課程合作，讓同學將捐血活動做為該課程主題，加強推廣校內捐血活動，並藉由該校資源獲得媒體報導。與逢甲大學則是與「領導智能」課程合作，讓研習同學走出教室，以課堂上學到的理論投入捐血公益活動。

加強利用網路工具，利用時下最流行的網路社群工具FACEBOOK粉絲團強力宣傳，以軟性、感人等多樣化的內容吸引民眾的注目，透過粉絲團傳遞正確的捐血知識與觀念並與粉絲們互動，積極募

集粉絲團人數，利用FACEBOOK強大的社群功能達到最佳的宣傳效果。

持續與轄區內國際獅子會臺灣總會、國際同濟會台灣區總會、國際佛光會中華總會、國際扶輪台灣總會等4大社團合作，以捐血接力或定期舉辦捐血活動的方式，協助捐血中心募集血液，俾使更多社團成員定期參與捐血社會服務公益事業。此外，尚有各種主題性質活動吸引更多捐血人參與，如與國興畜產公司合作於鹿港鎮體育場大門口前廣場舉辦「熱情彰化人、千人捐熱血」捐血活動、與華威影城及廣三SOGO百貨舉辦公益捐血活動，透過記者會與媒體報導，於血源短缺時讓更多民眾參與。

善用志工力量提供優質服務，目前台中捐血中心有40餘位志工，皆安排接受完整教育訓練，除了依規定完成基礎、特殊訓練，取得志願服務手冊外，每季舉辦一次工作檢討會，另派員參與成長訓練、督導訓練、衛生福利部全國志願服務資訊整合系統訓練及聯繫會報。目前志工主要安排假日於捐血定點服勤，及支援大型活動，志工的表現除深獲工作人員及民眾的肯定外，志工隊隊長李榮欽更榮獲103年臺中市績優衛生保健志工蘭馨獎。



In addition to the Changhua and Puli Blood Stations, Taichung Blood Center also consists of five fixed blood donation sites and more than 50 mobile blood donation sites. To provide a more comfortable environment for blood donors, Fortune Union CNS donated and built an entirely new Fortune Union CNS mobile on January 12 of this year at the original location of the fixed blood donation sites at Shin Kong Mitsukoshi Department Store. Not only is it spacious and bright, but it is also equipped with "double physical examination rooms" to speed up the process of physical examination, shorten donors' wait times, and promote service quality.

The original location of the fixed blood donation sites of the "NCHU mobile" alongside National Chung Hsing University at the intersection between Hsingda Road and Guoguan Road in South District of Taichung City, which was established on July 5, 1994, will be renovated in cooperation with Taichung City Government's construction of "the improvement of the Midori-Kawa downstream". Therefore, services at the NCHU mobile were formally ceased on September 1, 2014. To provide sufficient apheresis platelets, Taichung Blood Center is eager to have a proper location for a fixed blood donation room in Dali and Fengyuan in order to collect more apheresis platelets.

The "Taichung County Ren Shan Ren Shi Charity Association", which was founded by members of the Chairperson Association in 2003-2004 of the 300-C2 District and the Taiwan Headquarters of Lions Clubs International, donated a large mobile to Taichung Blood Center on May 31 of this year. The donation ceremony took place in the square of the Taiwan Provincial Consultative Council, where Wufeng, Tong Rui-yang, former Chairperson General of the Taiwan Headquarters of Lions Clubs International and Director of year 03-04 of the 300-C2 District and new Taichung City Mayor Lin Jia-long attended. The

new mobile will provide a whole new comfortable environment for donors.

The blood required by the hospitals within the territory of Taichung Blood Center is mostly delivered by a medical blood transport truck of the Blood Center so as to ensure blood quality. In 2014, 909,930 units of blood were freely offered to more than 620 hospitals in the area, saving countless lives. On October 18, Lee Ming Construction Co. donated a refrigerated blood transport truck to Taichung Blood Center at the 20th Anniversary Music Concert held at Summer Green Park. With its whole new design, this refrigerated blood transport truck is divided into three independent spaces. The compartment is maintained at different temperatures for the storage of plasma (-20°C), platelets (20-24°C), and erythrocytes (1-6°C). Taichung Blood Center currently owns seven blood transport trucks. With the launch of this new truck, blood quality and service safety can be better enhanced.

To enhance blood quality, the Blood Collection Section has used Hemo Quick Automatic Blood Collectors since August 26, while the component processing section has started testing 10 sets of LMB Dual Press Automatic Blood Component Extractors since November. In the future, automatic machines will be introduced. Later PICS/GMP inspections and visits to blood donation institutes have also been completed. On November 20, they were certified with PICS/GMP. To reinforce the partnership with hospitals, the Chief of the Technology Section, Wang Hshuan-hui, attended the 2014 Blood Bank Staff Professional Training Program—Basic Level held by the Taiwan Society of Blood Transfusion at China Medical University Hospital on July 11 to report on "Blood Components: Preparation, Storage and Transportation (including Leukoreduction) and promote the advantages of leukoreduction before storage. On November 11, Director Lin Chi-ling gave a lecture

on "Leukoreduction before Storage" at the clinical medicine conference at Puli Christian Hospital.

To familiarize students with the procedures of blood donation and deepen their understanding of blood donation concepts, students from the Medical Laboratory Science Group of the Department of Medical Laboratory Science and Biotechnology at Chung Shan Medical University, the Scout Club of Taichung Municipal Focus Junior High School, the Qun Yu English Cram School, and other educational institutes visited our center this year to not only learn about blood donation, but also to obtain ideas to spread blood donation concepts.

One of the ongoing objectives is to promote service quality. This year, the service quality educational training program invited the CEO of Taiwan Service Proprieties Quality Management Association, Huang Ai-ting, to give a speech on "Creation--the Only Irreplaceable Value, Six-Star Level Service--Updating New Programs" and the Manager of Sing Cheng Service Quality Management Training Institute, Liu Da-qing, to present the "Aesthetics of Speaking-- Good Quality Communication Skills" in the hope of promoting service quality and providing better services.

To cooperate with the Department of Health of the Taichung City Government, our center advocated knowledge regarding blood and the importance of blood safety at the Health Education Promotion Automobile's "Love, Medication" Carnival held at Park Lane of CMP on July 27; the Anti-Drug Promotion was held at Chung Yo Department Store in Taichung City on November 8; and the World AIDS Day Campaign was held at the arena of National Taiwan University of Sport on December 13.

We also takes advantage of mass media to

spread the blood donation ideas. In the first half of the year, our center cooperated with hit FM while in the second half of the year, our center worked with M-Radio to spread blood donation ideas and appeal to young people between the ages of 17-24 to make blood donation through 20-second commercials, interviews, and other special units that were broadcast during summer vacation, blood donation month, and the blood shortage period, spreading the information about Taichung Blood Center. Furthermore, our center also works with Place Broadcasting Service of Taichung Station to regularly hold blood donation activities each season and call for more people to take part in blood donation. In addition, we also actively promotes blood donation activities and calls for blood donation during blood shortage periods through billboards and commercials broadcast by local cable TV stations.

Our center continues to work with the Department of Communication Arts at Chaoyang University of Technology under academic and industrial cooperation to implement blood donation campaign projects. This year, the event focused on the celebration of the 40th anniversary of blood donation institutes to recruit touching stories regarding blood donation, create posters in an "animation" style to attract more young people to donate blood, and collect more excellent designs for the purposes of online marketing. In addition to academic and industrial cooperation, our center is also engaged in "Service Learning" courses so that students can make blood donation the topic of the course. Blood donation activities within the university can be further promoted, and the resources of the University can also be publicized. Our center cooperates with the "Lead Competency" course of Feng Chia University so that students can apply the theories they learn in class to blood donation charity work.

Our center publicizes itself through popular

social networking websites such as Facebook to attract the general public's attention with diverse content and convey correct blood donation knowledge and concepts. In this way, we can interact with its fans and use the powerful social networking function of Facebook to best spread the word.

We continues to work with the Taiwan Headquarters of Lions Clubs International, Kiwanis Taiwan, Buddha's Light International Association R.O.C., and Taiwan Rotary Club Association to hold regular blood donation relays or other activities to help our center collect more blood and attract more club members to regularly attend blood donation social service charity works. Furthermore, our center holds a variety of events with special themes to appeal to more donors, such as "Passionate People in Changhua: A Thousand Donors" held together with KuoHsing Poultry and Livestock Feeds Co. at the gate of Lukang Township Arena and a charity blood donation event held together with Vieshow Cinemas and KSSOGO

Taichung. Thanks to broadcasts by the press and mass media, more people can take part in blood donation during blood shortage periods.

Taichung Center currently has more than 40 volunteers undergoing complete educational training so that they can provide good quality services. In addition to completing basic and special training and acquiring the volunteering service manual, the volunteers will take part in a work review once every quarter. Some members will also attend development training, supervision training, Ministry of Health and Welfare National Volunteering Service Integration System Training and reporting meetings. The volunteers are assigned to serve at fixed blood donation sites during holidays, as well as to support large events. Their performance has been well received by both the staff and the general public. Moreover, the captain of the volunteer team, Li Rong-qin, won the 2014 Award for an Excellent Health Care Volunteer in Taichung City.

# 台南捐血中心

Tainan  
Blood Center

## 成立沿革

台南捐血中心，成立於民國70年7月1日，負責推廣雲、嘉、南地區的捐血活動，俾使病患醫療用血不虞匱乏，以達到地區醫療用血捐供平衡為首要任務。

台南捐血中心成立後，並分別於1982、1983年設置嘉義捐血站及雲林捐血站，以就近提供該地區熱心人士捐血服務與用血病患的供血服務，目前本地區可捐血人口數約為339萬餘人，其中實際捐血人口約106萬餘人。

## 傳愛40 有你真好

農曆春節期間血液短缺，為能及早充裕醫療用血，台南捐血中心於1月1日至1月31日舉辦「捐血月」活動，今年主題為「傳愛40 有你真好」，適逢台灣捐血事業40周年慶，也讓民眾知道台灣血液事業40年來的成果。

臺南市政府為響應捐血月，特於12月31日上午11點於民治市政中心1樓大廳舉辦捐血月活動記者會。賴清德市長、顏純左副市長、衛生局林聖哲局長等三位醫師出身的市府官員義不容辭，挽袖響應；許和鈞副市長、陳美伶秘書長、劉建忻副秘書長也一起挽袖捐血。台南捐血中心主任蔡光昭表

示，為了呼應今年「傳愛40 有你真好」的主題，國軍弟兄率先響應軍愛民的精神，軍方四個單位包括空軍四四三聯隊、陸軍航空特戰指揮部、陸軍砲兵學校、五四工兵群等部隊首長均到場呼籲並承諾成為台南捐血中心的「緊急支援團體」，大台南地區有發生緊急需要用血，他們會全面啟動緊急捐血作業。

## 614世界捐血人日

6月14日是世界捐血人日，台南捐血中心假台南遠東百貨戶外廣場舉辦宣導慶祝活動；活動內容包括同心協力接力賽、614愛的拼貼、現場捐血、club25熱血青年頒獎、衛教宣導，民眾讚譽有加。

103年的主題定為「Safe blood for saving mothers」，強調的是安全的血液挽救母親的生命，今年club25熱血青年社向校園紮根，目前會員人數已達3,024人，其中今年獲得金獎有105位、銀獎有76位、銅獎有93位，更有436名會員於去年定期捐血達三次以上，未來也期許更多的年輕人加入club25的行列。

## 捐血成果有賴各界幫助

嘉義鐵線製品股份有限公司於1月26日至10月17日止辦理捐血長跑活動，共計48場次，達到



與市民同樂——全嘉一起來嘉跨年倒數活動。

10,678單位，衝破萬袋溫情的目標。

西堤牛排於1月23日至25日在台南捐血中心各定點舉辦活動，共募得5,416單位。

雲林縣救國團團友會許舒博會長於3月9日至11月8日，主辦巡迴全縣20鄉鎮市的「一顆凡心動善念，萬袋熱血展愛心」捐血活動，共計55場次，捐得9,864單位。

捐贈空血袋共計6,758個、「AED」共計3台（新營扶輪社捐贈2台、東北扶輪社捐贈1台）。

嘉義捐血站參加「全嘉一起來嘉跨年倒數活動」，在迎接103年倒數第11天集結捐血志工、同仁一起讓全嘉義市民感受到「捐血傳愛 有您真好」的溫暖。

因應暑假缺血來臨，於6月25日商請台南市長賴清德協助宣傳錄製「呼籲市民踴躍捐血」錄音帶，結合垃圾車廣播推廣。

提供大台南地區民眾更便利的捐血據點，台南捐血中心於8月26日正式在北區特力屋文賢店啟用固定捐血點，讓往返安南區的民眾能就近捐血，提供更便捷之服務。

台南捐血中心與長榮大學醫管系合作，於103年9月30日正式簽約，提供學生以專業志工、學生實習與服務學習等方式之多元化場域，並進行產學交流，促進長榮大學與台南捐血中心合作之優良形象。當天長榮醫管系學生啦啦隊表演活潑有趣，為簽約儀式增添不少歡樂氛圍，同時亦辦理該校捐血活動，並有5名學生加入club25熱血青年的行列。

### 績優表揚大會 倍感榮耀

台南捐血中心於4月30日假台南市生活美學館演藝廳舉行「102年度捐血績優表揚大會」，當天邀請台南市政府賴清德市長、台南市衛生局林聖哲局長、台南大學黃秀霜校長、國際扶輪社陳清輝總監、國際同濟會澎嘉區李仁榮主席、國際同濟會雲林區程進祥主席及台南市捐血人協會侯慶輝理事長蒞臨，倍感榮耀。



## 透過各種互動讓我們更進步

103年2月25日舉辦新營地區社團座談會，8月15日邀請台南地區愛心社團至捐血中心參觀，並分享舉辦捐血活動之經驗，提出建議互相交流；透過最優良的宣傳方式，讓更多人加入捐血的行列，也向社團介紹中心現況。期許透過社團的力量，鼓勵民眾養成定點、定期的習慣，並協助鼓勵讓年輕朋友加入捐血的行列。

台南捐血中心於4月18日（台南捐血中心）、5月23日（永康捐血室）、6月21日（新營捐血站）、26日（雲林捐血站）、8月15日（嘉義捐血站）辦理完成5場次捐血家族座談會。

103年6月26日舉辦台南地區血液供應座談會，7月31日舉辦雲林嘉義地區血液供應座談會，邀請轄區內醫療先進及血庫相關人員前來出席。並針對「血液供應之趨勢、儲存前減白血品使用情形」進行專題演講，也對102年醫院「血液供應滿意度調查」做回應說明，透過座談會型式與醫院做最好的雙向溝通。

9月20日舉辦第三屆club25熱血青年研習營，共33人參與。本次活動地點選定於最新捐血地點—特力屋捐血點前舉辦，活動當天會員們自行彩繪海報、布條，一群人熱血青年上街吶喊「捐血一袋，救人一命！」，每個會員都是身懷絕技的募血小尖兵，引來民眾關心，達到宣傳捐血最好的效果，也讓年輕族群貢獻他們的捐血創意及巧思。

高齡捐血健康講座感恩會於9月25日假三樓會議室舉辦，並參觀供應、成分、採血作業流程，會中頒發感謝牌予屆齡捐血之王信雄、陳正育二人，共計有19人參加。

10月24日辦理稀有血型座談會，會後參觀供應、成分、採血作業流程，共計有8人出席。

## History

Established on July 1, 1981, Tainan Blood Center is responsible for blood donation in Yunlin, Chiayi, and Tainan so that the patients in that area can have enough blood for medical purposes. Its top priority is to keep a sufficient blood supply and demand balance in the region.

After Tainan Blood Center was established, it set up Chiayi Blood Station and Yunlin Blood Station in 1982 and 1983, respectively, to provide services for donors and hospitals. Currently, the region has about 3.39 million eligible donors and the actual donors exceed 1.06 million.

## Good to Have You—40th Anniversary of Blood Donation

To prepare in advance to have sufficient blood for medical purposes during Chinese New Year, Tainan Blood Center held events for Blood Donation Month between January 1 and January 31. The theme this year was "Good to Have You—40th Anniversary of Blood Donation". On the 40th anniversary of blood donation services in Taiwan, our center wanted to familiarize the general public with the achievement of blood services in Taiwan during the past 40 years.

In response to Blood Donation Month, Tainan City Government held the Blood Donation Month Press Conference at the City Administration Center. On December 31. Mayor Lai Ching-Te, Deputy Mayor Yen Chun-Tso, and Director of the Department of Health Lin Sheng-Che, all of them used to be doctors, donated their blood in the event. Deputy Mayor Sheu Her-Jiun, Secretary General Chen Mei-ling donated blood together. Director of Tainan Blood Center Tsai Kuang-Chao mentioned that to correspond to this year's theme of "Good to Have You—40th Anniversary of Blood Donation", the Corps of the ROC Armed Forces, such as chiefs of Air Force 443 Corps, Army



Aviation Command, Army Artillery School, 54 Sappers, etc. Attended the event and promised to become Tainan Blood Center's "emergency support groups". If there is an urgent need for blood in the Greater Tainan Region, they will comprehensively initiate emergency blood donation.

### **World Blood Donor Day "Safe blood for saving mothers"**

Tainan Blood Center celebrated World Blood Donor Day on June 14 in the outdoor square of Far Eastern Department Store in Tainan; the activities included a blood donation relay race, June 14 montage of love, blood donation, club25 award for young donors, and advocating for health education. The participants all thought highly of the events.

The theme for 2014 was "Safe blood for saving mothers". This year club25 advocated blood donation in schools. So far, there are 3,024 members. Among them, 105 won Golden Awards; 76 won Silver Awards; and 93 won Bronze Awards. Throughout the course of last year, 436 members donated blood more than three times. In the future, it is hoped that more young donors can take part in club25.

### **Blood Donation Depends on Help from All Walks of Life**

Chiayi Iron Wire Co., Ltd. held 48 blood donation events between January 26 and October 17, achieving the goal of 10,678 units.

Tasty Steak House Co. collected 5,416 units of blood at each fixed spot of Tainan Blood Center during January 23-25.

The Chairperson of China Youth Corps of Yunlin County, Xu Shu-bo, held the blood donation event "showing love by donating blood" in 20 different townships in Yunlin. A total of 55 events was held and

9,864 units of blood were collected.

Our center has received donations of 6,758 empty blood bags and 3 AEDs (Rotary Club of Hsinying donated two, while Rotary Club of Tainan Northeast donated one).

The volunteers and staff of Chiayi Blood Station participated in the "New Year Countdown before the coming of 2014 in Chiayi" so that all the citizens in Chiayi could feel that it's "good to have you and show love by donating blood".

To advocate blood donation during summer vacation, on June 25, Tainan City Mayor Lai Ching-Te was invited to record a tape to "call for citizens to actively donate blood", which would be broadcast on garbage trucks.

To encourage donors in the Greater Tainan Area, Tainan Blood Center formally set up a fixed blood donation site at B&Q, Wenxian Branch, North District so that the general public in Annan District can donate blood more conveniently.

Tainan Blood Center officially signed a contract with the Department of Health Care Administration of Chang Jung Christian University on September 30, 2014 to provide students a variety of ways to learn, such as professional volunteer work, internships, service learning, etc. The academic and industrial cooperation between Chang Jung Christian University and Tainan Blood Center creates a good image for both parties. On that day, the cheerleading performance of students of the Department of Health Care Administration brightened up the contract signing ceremony. Five of the students have already signed up for club25.

### **Praising Excellent Donors Convention**

Tainan Blood Center held the 2013 Praising

Excellent Donors Convention in the Auditorium of National Tainan Living Art Center on April 30. It was a great honor that Tainan City Mayor Lai Ching-Te, Director of the Department of Health of Tainan City Lin Sheng-Che, President of National Tainan University Huang Hsiu-shuang, Governor of Rotary International Zone 10 B District 3470 Chen Ching-hui, Chairperson of Penghu and Chiayi Area of Taiwan District of Kiwanis International Li Ren-rong, Chairperson of Yunlin Area of Taiwan District of Kiwanis International Cheng Chin-Hsiang, and Chairperson of Tainan City Donor Association Ho Qing-hui all attended the event.

### Interactions Improve Us

On February 25, 2014, our center held the Hsinying District Club Forum. On August 15, charity clubs in Tainan were invited to visit our center to share their experiences with holding blood donation events. Through the most effective promotion methods, more people can become donors. We also familiarized the clubs with the current conditions of our center, hoping that the clubs can encourage the general public, especially the younger generation, to regularly donate blood.

Tainan Blood Center completed five blood donors forums on April 18 (Tainan Blood Center), May 23 (Yongkang Blood Donation Room), June 21 (Hsinying Blood Donation Room), June 26 (Yunlin Blood Station), and August 15 (Chiayi Blood Station), respectively.

Our center held the Tainan Blood Supply Forum on June 26, 2014 and the Yunlin and Chiayi Blood Supply Forum on July 31, in which experts in medical fields and blood bank personnel were invited to talk about the "Trends of Blood Supply and Conditions of Pre-storage Leukoreduction", as well as respond to the 2013 "Survey on Level of Satisfaction for Blood Supply" in hospitals. Through the forums, the hospitals and our center can communicate well with each other.

A total of 33 young persons participated in the 3rd club25 camp held by our center on September 20 at the newest blood donation site—B&Q. On that day, members personally painted posters and banners to share the message of "A gift that saves lives!" Each member attracted great attention for blood donation in the most creative and ingenious ways.

The Appreciation for Elderly Donor Health Forum was held on September 25. A total of 19 participants attended the event. They were able to see the procedures of blood collecting, Component processing, and blood supply. During the event, two donors up to the maximal eligible age, Wang Xin-xiong and Chen Zheng-yu, received certificates of appreciation during the Forum.

We held the Rare Blood Group Donors Forum on October 24. A total of eight participants attended the forum. After the forum, they visited the operational procedures for blood collecting, component processing, and blood supply.

# 高雄捐血中心

Kaohsiung  
Blood Center

## 捐血、供血業務現況

高雄捐血中心於民國65年12月21日成立，業務區域涵蓋南台灣高雄市、屏東縣、澎湖縣，目前高雄捐血中心業務轄區人口數3,73萬餘人，服務之供血醫院、診所約200所。

本中心103年度全血捐血量389,833單位，分離術捐血41,348單位，滿足轄區醫療實際需求。103年較102年醫院實際需求的血液有增加之趨勢，其中紅血球增加0.4%（1,655u），血小板類增加0.7%（278u），血漿類則持續下降3.4%（8,917u）。

## 傳愛40 有你真好

103年農曆年前捐血月期間，為鼓勵民眾踴躍捐血，本中心於1月4日舉辦「高雄捐血中心捐血月暨111扶輪捐血接力活動記者會」，會中公布捐血資料庫中189萬3,108筆捐血人資料與2,964份問卷的分析，描述每個星座捐血的動機。天秤座是最愛捐血的星座；巨蟹座則是最愛捐500C.C.的星座；至於被認為龜毛的處女座則喜歡選在特別的日子捐血，如生日、結婚紀念日；牡羊座喜愛在颱風天捐血；而高雄勞工以摩羯座最熱血，透過有趣的話題行銷，引起捐血人與媒體的好奇心，進而宣傳捐血月籌募春節血液的訊息。

## 定期捐血 熱血一夏

為持續推廣定期定點捐血，今年持續推出「熱血一夏」捐血三次兌換限量熱血海灘褲，共計發出46,215張集點卡，吸引8,624捐血人蒐集此限量紀念品。

## 績優表揚 袋袋傳承

今年適逢捐血事業40周年，高雄捐血中心於4月19日至台北中山堂前參與「傳愛40 有你真好」慶祝園遊會，並以搭乘時光機的布景設計，以時光隧道的設計方式將捐血中心的照片回顧，讓民眾在攤位中感覺搭乘時光機一起回顧捐血中心歷史，也藉由氣球急急棒遊戲，獲得高雄捐血中心固定捐血點的相關知識。

除40周年慶祝大會外，本中心捐血績優表揚大會於5月9日假成功物流園區國際會議廳辦理，會中表揚861位分離術捐血人、1,292位全血捐血人、25個績優學校單位、41個績優機關團體、9個績優國軍單位、29個特殊貢獻的個人及團體單位等，頒贈績優獎狀、獎牌及獎章表達感謝。

## 改善作業場所及設備

本中心血品儲存庫體使用年限已高達13年，庫板及主機體陸續產生故障維修，於今年度汰舊更新

儲存血液之庫體以維護血液儲存安全無虞。

為提升捐血人服務與作業環境品質，屏東捐血站新建工程動土儀式也於今2月21日舉行。而原設置於三民公園的十全路「金聲同心號」也功成身退停止作業，為提供捐血人更好的服務、更舒適的場所，特於捷運紅線後驛站地下一樓設置「捷運三民捐血室」，於5月1日正式啟用服務捐血人。

### 技術交流 自我提升

除了捐血、企劃業務之外，本中心持續提升血液檢驗、成分製備相關技術與設備更新。為增進同仁對於風險管理的了解，於5月16日辦理品質相關課程教育訓練，邀請亞東醫院朱芳業主任授課，題目為「醫療照護失效模式與效應分析（HFMEA）概念及運用」。

6月21日與台灣輸血學會合辦103年度期中學術研討會，並由檢驗課技術督導針對「捐血中心檢驗自動化經驗」進行專題演講，期中、期末研討會均有多位同仁發表口頭論文報告。另台灣輸血學會也

與本中心合辦「血庫人員在職訓練基礎班」，與高屏地區血庫工作人員相互交流，彼此提升輸血醫學相關技術。技術組長林冠州並投稿Vox Sanguinis期刊，以「Detection and identification of occult HBV in blood donors in Taiwan using a commercial, multiplex, multi-dye nucleic acid amplification technology screening test」獲選。

本中心與國立成功大學醫學檢驗生物技術學系、輔英科技大學醫學檢驗生物技術系、高雄醫學大學醫學檢驗生物技術學系及義守大學健康管理系合作，提供學生檢驗專業實習、服務學習與企劃實習等方式之多元化產學交流，促進南部地區大專院校與捐血中心合作之經驗。

### 安全血液挽救母親的生命

6月14日世界捐血人日這一天，今年即將屆滿70歲的蘇淑賢阿嬤，在這天捐出個人第113次也是最後一次捐血。高雄捐血中心為她辦一場溫馨的「熱血畢業典禮」。



高雄捐血中心洪啟民主任（右三）熱情為蘇淑賢女士（中）舉辦熱血畢業典禮。





幼稚園小朋友參訪高雄捐血中心。

今年世界捐血人日活動主題是「安全的血液挽救母親的生命（Safe Blood for Saving Mothers）」<sup>1</sup>。雖然，目前台灣是產婦用血安全的先進國家，但是目前全世界每天約有800名婦女死於妊娠或分娩相關併發症。而蘇阿嬤40年前的故事正是今年世界捐血人日世界衛生組織關注的主題，除了「醫療用血100%由自願無償捐血供應」外，更應即時為孕產婦提供安全的血液及血液製劑，以降低孕產婦的死亡率。

蘇阿嬤捐血長達35年，「畢業典禮」之前，本中心為她拍了一段微電影，為了記錄她長達近40年感人的捐血故事，歡迎熱情的大家一起去點閱。

### 捐供平衡有賴各界支持

9月25日舉辦高雄地區血液供應座談會，邀請轄區內醫療先進及血庫相關人員出席，並針對「使用儲存前滅除白血球血品預防輸血反應」進行專題演講，會議中，充分了解醫院端需求，透過座談會與血庫人員做最好的溝通。9月19日辦理捐血團體座談會，高屏地區捐血團體共計20個團體32人參加座談，座談貴賓並參訪血液作業流程，了解血液捐

出後到達捐血中心的後製作業。

回顧103年，7月發生澎湖空難之後，緊接著高雄前鎮、苓雅區發生石化氣爆的重大事件造成民眾傷亡，傷患所需的血液由高雄捐血中心負責支援，也考驗我們的應變能力。為建立不可預期之災害發生時，醫療用血不虞匱乏，本中心特邀國軍部隊組成緊急捐血支援團體，轄區陸軍第八軍團、海軍陸戰隊指揮部、澎湖防衛指揮部、陸軍第四支援指揮部、陸軍43砲指部、陸軍裝甲564旅、陸軍75資電群等單位均加入了本中心緊急捐血支援單位。

氣爆事件發生時，高雄捐血中心庫存有足夠的血液能夠穩定供應病患需求，也不斷透過網路及媒體籲請民眾安心。但經過新聞及網路報導有數百人受傷住院後，各捐血地點仍大量湧入捐血人潮；從各地踴躍捐血的情況足可見台灣民眾的熱情與愛心。這段期間，眾多的愛心匯集成支持病患的力量，高雄捐血中心謹代表醫院的傷病患，向無私付出、挽袖捐血的愛心民眾致上最敬意：天佑高雄，感謝有您。

## Blood Donation and Supply Services

Established on December 21, 1976, Kaohsiung Blood Center provides services in Kaohsiung City, Pingtung County, and Penghu County. The population within the jurisdiction of Kaohsiung Blood Center exceeds 3.73 million. Our center provides blood for about 200 hospitals and clinics.

The amount of whole blood donation in 2014 was 389,833 units while donation for apheresis platelet was 41,348 units, meeting the actual medical needs of the region. The actual need for blood in hospitals in 2014 was greater than that in 2013. The need for RBCs increased by 0.4% (1,655 units); platelets increased by 0.7% (278 units); plasma needs have continued to decrease by 3.4% (8,917 units).

## Good to Have You—40th Anniversary of Blood Donation

During Blood Donation Month before the 2014 Chinese New Year, to encourage more blood donors, our center held the "Kaohsiung Blood Center Blood Donation Month and Rotary International District 111 Blood Donation Relay Press Conference" on January 4 to announce the analysis of the data of 1,893,108 donors and 2,964 questionnaires regarding the motivations for blood donation for each zodiac sign. Libra loves donating blood the most; Cancer loves to donate 500 ml blood. The pickiest, Virgo, likes to donate blood on a special day, such as a birthday or anniversary; Aries likes to donate blood after a typhoon; Capricorn laborers in Kaohsiung donate the most blood. The interesting topic intrigued both the donors and the media, advocating blood donation for Chinese New Year during Blood Donation Month.

## Donating Blood Regularly during Summer

In order to continue promoting regular blood donation at a fixed site, our center gave out free limited edition beach shorts for donors that donated blood

at least three times this year. A total of 46,215 reward cards were issued, attracting 8,624 donors to collect this gift.

## Praising Excellent Donors and Passing down the Experience

To celebrate the 40th anniversary of blood donation services, Kaohsiung Blood Center took part in the "Good to Have You—40th Anniversary of Blood Donation" fair at Zhongshan Hall in Taipei. By decorating our center's photos in terms of a time tunnel, the general public could view the history of our center by taking a trip through time. By taking part in the irritating maze balloon game, the participants could learn about the fixed blood donation site of Kaohsiung Blood Center.

In addition to the celebration convention, our center's convention for praising excellent blood donors took place at the international convention center of CP Logistics, Inc. on May 9. The event recognized and praised 861 blood separation donors, 1,292 whole blood donors, 25 schools, 41 facilities, 9 military corps, 29 individuals and groups with special contributions. Our center gave them certificates of excellence and medals to show its appreciation.

## Improving the Work Place and Equipment

The blood storage device of our center has been in use for 13 years while the plates and main machine have been broken and repaired one after another. Therefore, the storage body shall be replaced to keep blood safe.

To enhance the donor service quality and working environment, the Pingtung Blood Donation Station was renovated on February 21. The services of "Jinshen Tongxin", which was originally set up on Shichuan Road in Sanmin Park, were suspended. To provide better services and a more comfortable environment



for donors, the MRT Sanmin Blood Donation Site at B1 Houyi Station on the Red Line was formally opened on May 1.

### **Improving Oneself through the Communication of Technologies**

In addition to blood donation and planning services, our center continues to improve its technologies for blood examination and constituent preparation, as well as to update its equipment. To enhance the staff's understanding of risk management, our center held educational training regarding quality management on May 16. The Director of Far Eastern Memorial Hospital, Zhu Fang-ye, was invited to talk about "The Ideas and Use of HFMEA."

On June 21, our center organized the 2014 Mid-term Academic Conference with the Taiwan Society of Blood Transfusion. The Technical Supervisor of the Examination Section gave a keynote speech on "The Automation of Examination at Blood Centers." Many employees made oral reports at the mid-term and final conferences. Our center also held a "Basic Professional Training Program for Blood Bank Staff" with the Taiwan Society of Blood Transfusion and coordinated with the blood bank staff at Kaohsiung and Pingtung to enhance their blood transfusion medicine technologies. The Chief of the Technology Section, Lin Guan-zhou, presented the paper "Detection and identification of occult HBV in blood donors in Taiwan using a commercial, multiplex, multi-dye nucleic acid amplification technology screening test", which was accepted in the journal *VoxSanguinis*.

Our center cooperates with the Department of Medical Laboratory Science and Biotechnology at National Cheng Kung University, the Department of Medical Laboratory Science and Biotechnology at Fooyin University, the Department of Medical Laboratory Science and Biotechnology at Kaohsiung

Medical University, and the Department of Health Management at I-Shou University to provide students with diverse methods of academic and industrial interchange, including medical laboratory internships, service learning, planning internships, etc. So as to enhance the cooperation between universities in Southern Taiwan and our center.

### **Safe Blood for Saving Mothers**

On World Blood Donor Day on June 14, Su Shu-xian, a 70-year-old lady, donated blood for her 113th and last time. Kaohsiung Blood Center held a heart-warming "graduation ceremony" for her.

The theme for World Blood Donor Day this year was "Safe Blood for Saving Mothers." Although Taiwan is an advanced country for safe blood use for pregnant women, about 800 women die every day from complications caused by pregnancy or childbirth. The story of Madam Su forty years ago is just the kind of issue with which WHO is concerned on World Blood Donor Day this year. In addition to "100% voluntary and free blood supply for medical purposes," safe blood and blood products need to be offered to pregnant women in time to reduce their death rate.

Madame Su donated blood for 35 years. Before her "graduation ceremony," our center made a microfilm for her to record the touching story of her nearly 40 years of blood donation experience. Everyone is welcome to check it out on our website.

### **The Balance of Donation and Supply Depends on Support from All Walks of Life**

On September 25, the Blood Supply Forum took place in Kaohsiung. Our center invited experts and personnel in medical fields and blood banks to attend the Forum, one of whom presented a keynote speech on "Using Leukocyte-Reduced Products before Storage to Prevent Blood Transfusion Reaction." The

participants fully understood the hospitals' needs during the forum and communicated well with the personnel from the blood banks. On September 19, the Blood Donation Group Forum was held. A total of 20 clubs and 32 participants in Kaohsiung and Pingtung attended the Forum to familiarize themselves with blood processing procedures, from the moment of donation to the procedure once the blood is delivered to our center.

After the TransAsia air crash in Penghu in July 2014, many people dead and injured by gas explosions in Cianjhen and Lingya. The blood needed by the injured was supported by Kaohsiung Blood Center. These incidents tested our center's adaptability. To make sure the blood for medical purposes is sufficient during unexpected disasters, We specially invited military corps to form an emergency blood donation support group. The 8th Army Command, Navy

Command Headquarters, Penghu Defense Command, the Army's 4th Support Command, the Army's 43rd Artillery Command, the Army's Armor Brigade 564, the Army-owned electricity group 75, etc. All joined our center's emergency blood donation support unit.

During the gas explosions, Kaohsiung Blood Center had sufficient blood to supply the patients and was able to continuously assure the general public of such through the Internet and mass media. However, because it was reported that hundreds of people were injured, a large number of donors still flooded each blood donation spot, proving the passion and love of Taiwan's people. During this period of time, the love from these donors supported the patients. On behalf of the patients in the hospital, Kaohsiung Blood Center would like to express the deepest appreciation to the donors for their selfless contributions. God bless Kaohsiung. It is good to have your support.

# 花蓮捐血中心

Hualien  
Blood Center

花蓮捐血中心業務區域包括宜蘭、花蓮、台東三縣，為台灣東部地區唯一的捐血中心。為提供捐血方便性與醫療用血供應的及時性，另設有宜蘭捐血站與台東捐血站。

甫成立之初，捐血量明顯不足以供應東部地區使用，必須借助於其他捐血中心支援因應，經過多年努力以及地區內各社團、學校、部隊及機關等的協助，加上熱心捐血人的挽袖參與，近年來捐供血已漸趨平衡，即使偶有缺血訊息發出，也都能在極短時間內號召到捐血人補足血量。

## 企劃採血業務

捐血企劃主要任務是宣導捐血募集足量的醫療用血。除了每年訂定的目標捐血量，企劃還必須與供應部門充分配合，視醫院供血需求即時調整捐血募集量，是一個機動性高且責任相當吃重的單位。

社團、學校、部隊仍是區域內承辦捐血活動的主力。在宣導捐血部份，本中心事先與各單位進行捐血活動邀約時，會視單位的需要，安排人員前往進行捐血前宣導。近年來受到部隊人力精簡以及少子化的影響，年輕捐血人捐血比率有大幅減少的趨勢，我們也設有官網及FB粉絲團，今後的宣導重點，將加強年輕族群捐血觀念的再教育，希望透過

網路與社群的經營，讓正確的捐血觀念廣被年輕人所接受。

每年固定舉辦的捐血績優表揚大會，也是本中心的年度大事，為慶祝台灣無償捐血推動40年，103年特別擴大舉辦表揚活動，大會在溫馨且流暢的氣氛中進行，深獲與會貴賓與捐血人的讚揚。另外，捐血團體座談會與6月14日的世界捐血人日，除了表彰捐血人在無償捐血運動的貢獻之外，也提供雙向溝通的機會，大家共同的期盼都是希望捐血運動能更普及，成為全民愛心奉獻的典範。

## 供血業務

本中心區域內用血醫院共計有40家，其中醫學中心1家，區域醫院6家，地區醫院16家，診所17家。血品的使用以紅血球濃厚液為大宗，其次是血漿類，再其次是血小板類。血小板的供應已逐漸減少傳統血小板的製作並改以對病患療效較佳、副作用較小的分離術血小板為主，其中又以減除白血球之分離術血小板受到醫院血液腫瘤科醫師認可，使用量有明顯增加。

各醫院血庫與供應部門，平時即保持相當密切的聯繫，遇到醫院有任何問題，本中心供應部門皆



花蓮和泰5號大型捐血車捐贈儀式。

非常樂意幫忙解決；每年固定舉辦的血液供應座談會，是區域內各醫院血庫人員相互交流的平台，本中心也會聘請專家介紹血液發展新科技，達到相輔相乘的效果。此外，慈濟大學醫學檢驗生物技術系自8月起分7梯次共23位學生至本中心技術組見習，讓這些未來的醫技生力軍對捐血機構處理安全血液的過程有更深刻的了解。

### 成分血製作

捐血人所捐出的全血必須經由捐血中心成分部門予以分離出不同的血液成品才得以供應至各醫院。目前本中心所製作的血液成分包括紅血球濃厚液、減除白血球之紅血球濃厚液、洗滌紅血球、血小板濃厚液，分離術血小板、減除白血球之分離術血小板、新鮮冷凍血漿、冷凍血漿及冷凍沉澱品。103年本中心汰換二部冷凍離心機，年底增加四部血液自動壓板機，對血液成分製作品質更增一層保障。

### 血液品質維護

為維護血液品質，及確保每個作業流程皆按既定的標準作業程序執行，除了每年固定安排稽核員

執行內部稽核之外，亦接受外部機構如衛生局、衛生福利部所聘請的血液專家執行外部稽核。對所開列的缺失或建議事項，也皆能在預定的時間內改善完成。

各項血品的品管資料每月皆公告於本中心官網中，對於與血液相關的關鍵性耗材採取高標準驗收，有任何缺失皆即時反應。

### 教育訓練

為提升在職人員必要的專業訓練，各部門皆訂有教育訓練計畫，包括服務稽核人員訓練、面談諮詢教育訓練、新進人員技能訓練與評估、量測儀器設備驗證訓練、個資保護教育訓練、防災避難消防演練、各組在職人員教育訓練等共51場。

另外每季舉辦醫學期刊讀書會，加強工作人員閱讀原文期刊與學習研究的方法，每年至少提出一篇血液科技研究計畫，且視研究內容向血液相關國際性會議提出海報論文，未來將朝投稿重要血液期刊並獲得刊登的方向努力。

## 各界回饋

利用捐血車機動性地至各鄉鎮辦理捐血活動是籌措血源很重要的工具。本中心現有的捐血車與血液運送車等皆由社會熱心公益企業或國際性社團如獅子會、扶輪社、同濟會等所捐贈。今年獲贈由和泰汽車股份有限公司所捐贈一部大型捐血車提供宜蘭捐血站使用，全新的設計以及符合標準的問診空間，讓捐血成為一種享受。

## 社會服務

秉持「取之於社會，用之於社會」的精神，花蓮捐血中心每年都會在歲末年終時號召員工將平常用不到的物資，加上自由樂捐的金額送至需要的社服機構。繼玉里安德啟智中心之後，今年選定天主教善牧社會福利基金會花蓮兒童之家作為捐贈的對象。捐贈的物資包括衣褲、手機、兒童玩具、白米、其他生活用品及現金等。

花蓮捐血中心官方網站：

<http://www.ha.blood.org.tw>

愛捐血網站：<http://www.i-blood.org.tw>

花蓮捐血中心FB粉絲團：

<https://www.facebook.com/Hualienblood>

Hualien Blood Center is the only blood center in Eastern Taiwan which serves Yilan, Hualien, and Taitung three counties. For the convenience of donors and to supply blood in a timely manner, Yilan blood donation station and Taitung blood donation station have been set up.

Since the establishment of Hualien Blood Center, the amount of blood has been clearly insufficient for the eastern part of Taiwan. Our center needed other centers' support. After many years of efforts by our center and with the support of various clubs, schools, corps, and facilities, as well as enthusiastic donors' contributions, sufficient amounts of blood can be collected in a short time, although there is still the occasional blood shortage.

## Blood Collection Planning

Donor Recruitment Section mainly advocates having a sufficient amount of blood donated for medical purposes. In addition to the designated blood amount goal each year, Donor Recruitment Section has to cooperate with the Blood Distribution Section to adjust the amount of blood collection according to the hospital's demands. It is a highly flexible unit with a lot of responsibilities.

Various clubs, schools, and corps make up the area's major blood donors. To advocate blood donation, before inviting a unit to hold a blood donation event, our center assigns staff to encourage blood donation preparation. Recently, due to the influence of the reduction of military forces and the decreasing birth rate, the rate of young donors has decreased remarkably. The official website and Facebook fan page will thus focus on the re-education of the younger generations regarding blood donation concepts, hoping that the correct concepts of blood donation can be widely accepted by them through the Internet and social networking websites.



One of our center's major events is the "Annual Convention for Praising Excellent Donors". To celebrate the 40th anniversary of free blood donation in Taiwan in 2014, the convention was expanded into a larger event. With a heart-warming atmosphere, the convention was highly complimented by guests and donors. The blood donation group forum and World Blood Donor Day on June 14 not only honored the donors' contributions to free blood donation movements, but also provided a chance for mutual communication. It is everyone's common hope to promote blood donation and turn the act into a symbol of devotion and love.

### Blood Supply

A total of 40 hospitals are supplied with blood by our center; they consist of one medical center, six regional hospitals, 16 district hospital, and 17 clinics. The use of blood is mostly packed red blood cells, followed by plasma and platelets. The supply of platelets concentrates has gradually changed into platelets apheresis, which is more effective and has fewer side effects. Leukocyte-reduced apheresis platelets have been accepted by doctors of the Division of Hematology and Oncology; therefore, more is now being used.

The blood banks in each hospital and the Blood Distribution Section have been keeping in close contact. In this way, if a hospital has any questions, the Blood Distribution Section of our center is more than willing to help. The Annual Blood Supply Forum is a platform for mutual communication among blood bank personnel in each hospital in the region. We also invites experts to introduce the latest blood development technology so that improvements can continue to be made. Furthermore, the Department of Medical Laboratory Science and Biotechnology at Tzu Chi University has assigned 23 students in seven sessions to learn in the Technology Section of our

center since August so that the new generation can have a better understanding of how a blood donation facility processes safe blood.

### Making Blood Components

The whole blood donated by donors will be separated into different blood products by the Component Processing Section of the Blood Center in order to provide said products to each hospital. Currently, the components prepared by our center include packed red blood cells, Leukocyte-reduced red blood cells, washed red blood cells, platelets concentrate, Apheresis Platelet, Leukocyte-reduced Apheresis Platelets, fresh frozen plasma, frozen plasma, and cryoprecipitate. In 2014, our center replaced two refrigerated centrifuges with new ones and added four Automatic Blood Component Extractors. The blood component quality is now better guaranteed.

### Blood Quality Maintenance

To maintain blood quality and ensure that each operational procedure meets the designated standard operating procedures, in addition to regular yearly internal auditing, our center also accepts external auditing from other facilities, such as blood experts hired by the Department of Health and the Ministry of Health and Welfare. Our center aims to improve any deficiencies and follows any suggestions within the designated time limit.

The data regarding the quality control of each blood product are announced on our center's website. The key consumables related to blood are examined under high standards. Any and all defects will be assessed and corrected to immediately.

### Educational Training

To enhance employees' profession, each department has educational training programs; including 51 training programs such as service auditor



training, interview consultation educational training, new staff skill training and assessment, measurement instrument and device verification training, personal information educational training, disaster prevention and fire drill, employee educational training, etc.

Yearly on a quarterly basis, our center holds a medical journal study session to reinforce the staff's ability to read English journals and research methodologies. At least one blood technology research project is proposed each year. Depending on the content, some of the research may be submitted to related international conferences as poster papers. In the future, our center will work hard to submit papers to be accepted in important blood journals.

### **Contributions from Others**

Bloodmobiles can flexibly collect blood from each township. The current bloodmobiles and blood transport trucks owned by our center have all been donated by public-spirited corporations or international clubs such as Lions Clubs International,

Taiwan Rotary Club Association, Kiwanis Taiwan, etc. The large bloodmobile donated by Hotai Corporation this year will be used by Yilan Blood Donation Station. Its whole new design and standard inquiry room will make blood donation more comfortable.

### **Social Service**

With the spirit of "taken from the community, giving back to the community" We calls for its employees to donate materials and money to social service facilities in need at the end of every year. This year, after donating to An De Special Education Center in Yuli, our center donated materials to Hualien Children's Home of Good Shepherd Social Welfare Services, including clothing, mobile phones, toys, rice, life goods, cash, etc.

Hualien Blood Center: <http://www.ha.blood.org.tw>

i-Blood: <http://www.i-blood.org.tw>

Hualien Blood Center Facebook Fan Page:

<https://www.facebook.com/Hualienblood>

# 大事紀

## Chronicles



### 1 月

- 1日 ● 103年捐血月活動自1月1日至1月31日正式展開，捐血月主題為「傳愛40 有你真好」。捐血月記者會於102年12月27日（星期五）上午10：30在本會會議室舉行。為豐富記者會內容，邀請少有及稀有血型捐血人陳玉秋小姐及張麗勤小姐進行分享，並邀請屆齡捐血人王輝雄先生傳承給新生代捐血人陳永璋先生，呼籲年輕族群加入捐血救人的行列。
- Yahoo奇摩購物中心首度舉辦「2014熱血一次」捐血活動，邀請多位名人（如藝人蕭敬騰、郭書瑤、賈永婕、超馬好手陳彥博等）錄製「捐血名人影音風雲榜」，並於網站強力放送，希望藉此號召更多人在農曆年前加入捐血行列。元旦於台北捐血中心忠孝號捐血車舉辦記者會，超馬好手陳彥博現身極力宣傳與民眾互動來「熱血一次」。當日活動共募得192袋（每袋250ml）。
- 2日 ● 國興畜產公司董事長林桂添、彰濱廠商協進會理事長黃呈濱、鹿港鎮鎮長黃振彥以及台中捐血中心主任林啟靈於鹿港鎮公所舉行記者會共同呼籲民眾挽袖捐血。
- 4日 ● 國際同濟會台灣總會中C區於台中新光三越捐血車舉辦「捐血傳愛、青春無毒」捐血活動開幕式暨捐血、反毒、拒菸、防愛滋自行車宣導遊行活動，當日共募得血液221袋。
- 5日 ● 國興畜產公司於鹿港鎮體育場大門口前廣場舉辦「熱情彰化人、千人捐熱血」活動，台中捐血中心出動4輛大型捐血車，當日共募得血液1,095袋。
- 國際獅子會300F區花蓮第一獅子會捐贈花蓮捐血中心宣傳車一輛，由主任王雲龍代表受贈；並於1月1日至19日於花蓮捐血中心捐血室辦理捐血活動，19天共募得血液1,003袋。
- 6日 ● 台北老爺大酒店為慶祝30週年，舉辦「傳承血脈·展望未來」慈善捐血公益活動記者會。台北老爺酒店總經理笹谷久雄特於會中鼓勵民眾捐血，老爺酒店辦理捐血活動特贈餐券以饗捐血人。

- 12日 ● 台中新光三越定點捐血車「聚合發號」啟用剪綵儀式，早上9點半在台中市惠安停車場內舉行。儀式由聚合發建設董事長陳世坤先生、總經理祁興國先生、臺中市政府社會局副局長廖素玲共同剪綵。
- 14～17日 ● 澳洲CSL血漿工廠訪查高雄捐血中心（14至15日）及台北捐血中心（16至17日）。
- 17日 ● 台北捐血中心於峨嵋號捐血車舉辦「由星座看見台灣捐血之愛」捐血月記者會，邀請最熱血星座「天秤座」代表張博欽、楊博宇、吳千卉和全台捐血趴趴走潘鳳玉分享愛的故事。當天並有「傳愛40 有你真好」～血寶寶與黃色小鴨西門町踩街宣傳活動與民眾互動。
- 18日 ● 金格珠寶銀樓於台中公園門口廣場舉辦第六屆大型捐血活動。台中捐血中心出動4輛捐血車，當日共募得血液1,493袋。
- 23～25日 ● 西堤牛排為配合捐血月活動於1月23至25日共3天，舉辦「百萬熱血青年召集令」捐血活動，並提供30,000份「熱血護照」於全台共58個捐血點贈送捐血人，本次活動共募集血液31,229袋。
- 25日 ● 103年捐血月「傳愛40 有你真好～福氣捐血迎新年暨瑞唐1號多媒體捐血車啟用典禮」活動，假桃園展演中心舉行。新竹捐血中心楊炳炘主任扮捐血財神爺駕哈雷重型機車發送限量血寶福袋與捐血好友歡度農曆新年；20位愛心哈雷騎士響應捐血、捐血人潮踴躍，並獲各大媒體熱烈報導。



績優捐血人晉見總統合照（總統府提供）。

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## 2 月

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- 2月2日～3月31日** ● 中華郵政公司於2月2日至3月31日於全國各地郵局辦理237場次捐血活動，共募集血液31,785袋。
- 7日** ● 群益證券於台北市松仁路總公司舉辦「群起獻愛心，傳遞幸福公益」捐血活動，本會並致贈群益金鼎證券感謝牌，由董事長王濬智與總經理趙永飛代表接受，表彰群益金鼎證券長期支持捐血活動。1月27日至3月31日於全國6個分公司辦理捐血活動，共募集血液809袋。
- 7～12日** ● 新光人壽2014年新光全國捐血活動，於新光人壽保險摩天大樓廣場辦理「捐好血・好熱血」活動啟動儀式。本會並致贈感謝牌，由新光金控資深協理張日政、新光人壽協理陳正輝、新光銀行資深經理李孜馨代表接受。2月7日至12日於全國12個地點辦理捐血活動，共募集血液1,531袋。
- 14日** ● 國泰金融中心主辦「愛心捐血」活動，再次號召國泰金融中心的企業參與公益。國泰世華銀行李長庚總經理、UBS瑞銀集團陳允懋總經理、EPSON愛普生李隆安總經理等均蒞臨現場為活動加油。
- 會計師公會理事長羅淑蕾委員聯合台北市醫師公會、律師公會、建築師公會共同舉辦「四師聯合捐血送愛」記者會，當日就捐入398袋熱血。
- 22日** ● 草屯國際獅子會及草鞋墩國際獅子會舉辦聯合月例會，會中草屯國際獅子會捐贈2,350個空血袋；草鞋墩國際獅子會捐贈400個空血袋給台中捐血中心，由主任林啟靈受贈並感謝兩會善心義舉。

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## 3 月

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- 19日** ● 國際獅子會300F區宜蘭中山獅子會及木蘭獅子會捐贈花蓮捐血中心空血袋1,200個，由主任王雲龍代表受贈。
- 21日** ● 國際獅子會300A3區總監吳天寶率獅友49人參訪台北捐血中心，瞭解捐供血作業流程。該區台北市梅花獅子會同時捐贈1,000個空血袋，由該會余遠書會長代表捐贈，台北捐血中心主任洪正昇受贈。
- 25日** ● 40周年紀念別冊《傳愛40 有你真好》印行。
- 29日** ● 國際青商會3月29日於全國各分會辦理29場次捐血活動，共募集血液5,249袋。

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## 4 月

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- 11日** ● 花蓮捐血中心台東捐血站前往綠島辦理捐血，由綠島獅子會主辦，共募得95袋。
- 12日** ● 國際扶輪3500地區假新竹縣體育館辦理「大型捐血車4輛暨血液運送車1輛」捐贈典禮，由台灣血液基金會董事長葉金川代表受贈。衛生福利部政務次長林奏延並頒贈扶輪社「衛生福利部感謝狀」，新竹縣長邱鏡淳、新竹市長許明財等地方首長均蒞臨盛會。
- 14日** ● 下午13時台北老爺大酒店為慶祝30周年慶於3樓明宮廳舉行慶祝茶會，慶祝1月至3月辦理10場捐血活動，超出目標量30萬ml，實際募集血液389,500ml。





陸軍南區測考中心官兵響應捐血救人。

- 18日 ● 台灣血液基金會舉辦「傳愛40 有你真好」台灣捐血事業40周年感恩記者會暨影片發表會，假誠品敦南店舉行；邀請到捐血人許德英、沈秋宏、喻家貞及受血人張育禎與會，並請到當年拍攝「我不認識你，但是我謝謝你」影片及海報的小女孩黃薇年擔任神秘嘉賓。
- 19日 ● 台灣捐血事業40周年慶祝大會暨台北捐血中心102年度捐血績優表揚大會假台北市中山堂前廣場舉辦，衛生福利部部長邱文達、內政部部長陳威仁均蒞臨現場頒獎；孫越、陳淑麗及王念慈均參與本次慶祝大會。
- 24日 ● 台中捐血中心102年度捐血績優表揚大會上午9時30分假潮港城國際美食館舉行，台中市市長胡志強、台中市政府衛生局局長黃美娜、台中市政府社會局副局長陳坤皇及陸軍第十軍團政戰副主任張勉上校均出席頒獎。
- 25日 ● 花蓮捐血中心於花蓮福容飯店舉辦「102年度捐血績優表揚大會」。共表揚242位百次以上分離術捐血人、208位百次以上全血捐血人、64個社團、11所學校、4個軍方單位及19個特殊貢獻團體受獎。花蓮縣縣長傅崐萁、陸軍花東防衛指揮部副指揮官古勝文、國際獅子會300F區第三專區主席黃淑珠、花蓮市前市長葉耀輝、國軍花蓮總醫院政戰處長曾威銓、花蓮縣護理師護士公會理事長張淑娟均出席頒獎。
- 28日 ● 高雄捐血中心金聲同心號（十全金聲號）功成身退停止作業。該輛捐血車於民國91年5月20日由金聲廣播電台號召聽友共同贊助，服役近12年，至除役為止共有177,521位民眾捐血250,570袋熱血。
- 29～30日 ● SGS台灣檢驗科技公司至苗栗捐血站及新竹捐血中心進行ISO認證定期訪查。
- 30日 ● 台南捐血中心假台南市生活美學館演藝廳舉行「102年度捐血績優表揚大會」，邀請到台南市市長賴清德、台南市衛生局局長林聖哲、台南大學校長黃秀霜、國際扶輪社總監陳清輝、國際同濟會澎湖區主席李仁榮、國際同濟會雲林區主席程進祥及台南市捐血人協會理事長侯慶輝。

## 5月

- 1日 ● 高雄捐血中心捷運三民捐血室正式啟用，地點位於高雄捷運後驛站地下一樓2號出口處。
- 6日 ● 新竹捐血中心102年度捐血績優表揚大會假新竹國賓飯店辦理，新竹縣長邱鏡淳、新竹市長許明財、新竹市衛生局長吳青雲、新竹縣衛生局長副局長江松福均到場參與，並頒贈感謝狀。
- 14日 ● 元培科技大學師生共45人至台北捐血中心參訪。
- 15日 ● 台北市百齡國小四年級師生與家長共60人參訪台北捐血中心，透過「血球劇場」表演，讓同學們瞭解血液常識及捐血救人的意義，相約長大一起捐血救人。
- 24日 ● 花蓮捐血中心主任王雲龍及專員曾慶熹參加花蓮縣第一國際獅子會新舊會長交接，王主任並致贈1月5日該會所捐贈的「第一獅子號」捐血宣傳車模型，由會長傅岷其代表接受。
- 30~31日 ● 亞太血液連線（APBN）會議於韓國首爾舉行，由執行長魏昇堂代表參加。
- 30日 ● 中油公司慶祝68週年舉辦「中油百萬CC熱情公益」捐血活動，於本年辦理慶祝大會，並由基金會公關處處長叢萍代表出席並致贈感謝牌；自去（102）年7月至今（103）年4月共募集血液4,168袋（1,042,000ml），達到預定目標捐血量。
  - 全國認證基金會（TAF）至台北捐血中心進行「醫學實驗室認證」評鑑。
- 31日 ● 由國際獅子會臺灣總會300C2區03-04年會長聯誼會成員所組成的台中縣人山人市愛心功德會，在總監童瑞陽號召下，募集款項捐贈大型捐血車「人山人市號」一輛。



新竹捐血中心舉辦2014世界捐血人日慶祝活動。



## 6月

- 1～5日 ● 2014年國際輸血學會（ISBT）第33屆國際會議1日至5日於韓國首爾舉行。由執行長魏昇堂領隊，團員包括：台南捐血中心主任蔡光昭、花蓮捐血中心醫務組長林麗玲、台北捐血中心技術督導陳曉芬、新竹捐血中心技術組長楊婷婷、台中捐血中心技術組長王萱慧。
- 21日 ● 台灣輸血學會假高雄捐血中心辦理103年度期中學術研討會，主題為「自動化」。高雄捐血中心由檢驗課技術督導林憲正專題演講，企劃課課長葉正弘口頭論文報告；台南捐血中心發表3篇口頭報告，分別為品保組陳叔賢、嘉義站吳佳美及駱宛儀。

## 7月

- 2～7日 ● 高雄捐血中心主任洪啟民、技術組長林冠州奉派至德國參加「XIII European Symposium on Platelet and Granulocyte Immunobiology」研討會。
- 6日 ● 台南市一誠協力慈善會假台南公園舉辦捐血活動，共出動十部大車，捐入2,409袋。
- 7～11日 ● 衛生福利部食品藥物管理署至高雄捐血中心進行PIC/S GMP訪查及捐血機構訪查。
- 15～18日 ● 衛生福利部食品藥物管理署至新竹捐血中心進行PIC/S GMP訪查及捐血機構訪查。



台北捐血中心在海軍司令部辦捐血活動，熱血女軍官捐出熱血。

- 20日 ● 台南捐血中心斗六車站捐血點撤點，結束作業。
- 22日 ● 衛生福利部食品藥物管理署至台中捐血中心進行捐血機構訪查。
- 23日 ● 澎湖馬公復興航空空難，高雄捐血中心與馬公捐血站啟動緊急應變機制，讓澎湖地區用血狀況維持正常。
- 24～25日 ● 衛生福利部食品藥物管理署至台中捐血中心進行PIC/S GMP後續訪查及捐血機構訪查。
- 25日 ● 財團法人中和福和宮及廣濟宮各捐贈5,000個空血袋予台北捐血中心，由業務組組長黃谷鶯代表受贈。
- 31日 ● 高雄前鎮區發生大規模氣爆事件，死傷者眾，高雄捐血中心緊急調度，血液供應無虞。

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## 8 月

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- 1日 ● 大石文化公司舉辦2014國家地理雜誌「邀您一起挽袖捐血看世界」活動，共提供「國家地理雜誌」5,000冊，自今日起於各捐血站及捐血室贈送捐血人。
- 4日 ● 和泰汽車公司自8月4日至9月4日舉辦第3年全國捐血月活動。該公司並於8月4日分別捐贈台北及花蓮捐血中心定點捐血車及大型巡迴捐血車各乙輛，當日上午於



台北捐血中心舉辦2014世界捐血人日慶祝活動。

長源汽車土城服務廠舉行捐贈儀式。和泰公司特別為本次活動新拍攝30秒鼓吹捐血影片於電視等媒體播放，並同時置放本會網站上。

- 15日 ● 電通國華公司舉辦「LINE跑跑薑餅人愛心接力跑」活動，提供手機遊戲虛寶卡共10萬張分送各捐血中心，自本日至10月15日活動期間轉贈捐血人，送完為止。
- 16日 ● 台灣醫院協會假台北榮民總醫院介壽堂辦理「103年第22屆第1次會員大會」。為加強醫療業務交流，宣傳本會業務，特別提供本會102年年報、減白血品推廣文宣供與會者索取。
  - 台中市糕餅商業同業公會於台中公園舉辦捐血送月餅活動，台中市副市長蔡炳坤亦蒞臨現場向捐血民眾及糕餅公會工作人員致意，當天共募集435袋血液。
  - 國際獅子會300C1區自8月16日起至12月7日舉辦捐血接力活動；本日上午9點假台中中正捐血室舉辦發起儀式，台中捐血中心主任林啟靈出席致謝意，當日共募得145袋血液。
- 23日 ● 高雄成功廣播電台「成功放送頭」錄製90分鐘捐血特輯，由高雄捐血中心企劃課長葉正弘與高雄市慈善團體聯合總會理事長黃國良、同心慈善會會長陳金生受訪。
- 25日 ● 苗栗中央獅子會、華馨獅子會贊助苗栗捐血站捐血人生日禮，國際獅子會300G1區總監戴美玉蒞臨指導，新竹捐血中心主任楊炳炘代表受贈並回贈錦旗致意，感謝其熱心支持捐血公益。
- 26日 ● 台南捐血中心特力屋捐血點啟用儀式記者會，邀請衛生局局長林聖哲、特力屋台南文賢店店長陳天惠、經理郭佳芬、台南市回社慈善會洪中和理事長、莊戊群總幹事等共同剪綵。
- 27日 ● 富邦慈善基金會於7月8日至8月27日辦理28場次捐血活動，共募集血液4,385袋。
- 29～30日 ● 財團法人醫院評鑑暨醫療品質策進會假福華文教會館辦理「2014年台灣健康照護聯合學術研討會暨亞洲健康照護品質協會年會」活動。本會提供102年年報及減白血品推廣文宣供與會者索取。

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## 9月

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- 1日 ● 因配合台中市政府「綠川下游周邊環境改善延續工程」，台中捐血中心興大捐血車自本日起結束作業。
- 3日 ● 台南捐血中心嘉義站在嘉義市政府舉辦「我嘉有情、挽袖邀約」嘉義心、鐵線情捐血記者會。6日嘉義鐵線製品股份有限公司假嘉義市立棒球場停車場暨嘉義捐血站共同辦理捐血活動，共捐得血液1,156袋。
- 4日 ● 和泰汽車於8月1日至9月4日在全國76個地點辦理捐血活動，共募集血液6,059袋。
- 5日 ● 南山人壽慈善基金會於5月3日至9月5日，在全國96個地點辦理「2014南山捐血月」活動，共募集血液12,835袋。
- 6日 ● 國泰慈善基金會於7月1日至9月6日在全國87個地點辦理「2014國泰夏日捐血活動」，共募集血液16,380袋。
- 18日 ● 中國信託人壽本日於台北、台中、台南及高雄地區舉辦9場捐血活動，共募集血液717袋。



- 國際獅子會300A1區總監黃義瀚率隊共60人至台北捐血中心參訪，並致贈血袋7,184個，台北捐血中心主任洪正昇代表受贈。
- 19日 ● 為建立不可預期之災害發生時，醫療用血不虞匱乏，高雄捐血中心特邀陸軍第八軍團、海軍陸戰隊指揮部、澎湖防衛指揮部、陸軍第四支援指揮部、陸軍43砲指部、陸軍裝甲564旅、陸軍75資電群等加入緊急捐血支援團體。

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## 10 月

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- 7日 ● 社團法人台北市愛心會12人參訪台北捐血中心，瞭解捐供血作業流程，同時捐贈1,000個空血袋，由主任洪正昇代表受贈。
- 8～12日 ● 由廣州血液中心及南方醫科大學主辦之「第十六屆中南地區輸血學術交流暨國際隱匿性乙型肝炎病毒感染（OBI）研討會」於10月8日至12日舉辦，本會公關處長叢萍受邀，並就「獻血者招募」作專題講座。
- 11日 ● 台北市不動產開發商業同業公會及8個建設公司，捐贈16,000個空血袋，假新北投捷運站舉辦血袋捐贈儀式，台北捐血中心主任洪正昇代表受贈。
- 17日 ● 高雄市慈道慈善會簽訂捐贈備忘錄，捐贈高雄捐血中心血液運送車一部。
- 18日 ● 新竹捐血中心志工參加新竹縣政府舉辦之「103年新竹縣衛生局志工表揚大會」，志工曾秋華小隊長等3位獲頒金質獎、丁金環獲頒銀質獎。
  - 麗明營造公司捐贈冷凍冷藏血液運送車一輛給台中捐血中心，於該公司在台中市夏綠地公園舉辦的「20周年慶感恩音樂會」中舉辦頒贈儀式，捐贈儀式由麗明營造公司董事長吳春山將象徵血液運送車的金鑰匙贈送給台中捐血中心，主任林啟靈代表接受。
- 24日 ● 台中捐血中心成份課技士金國華獲選為台中市103年度模範身心障礙勞工，於10月24日在「臺中市103年晉用身心障礙者績優機關暨模範身心障礙勞工表揚大會」接受台中市政府秘書長曹美良頒獎表揚。
- 29日 ● 台北捐血中心辦理主管職訓暨「GMP持續教育」，邀請前食品藥物管理署呂理福科長授課，及董事長葉金川專題演講「台灣血液事業之發展與展望」。

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## 11 月

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- 8日 ● 關聖恩公慈善基金會由董事傅兆林代表捐贈1,000個空血袋，花蓮捐血中心王雲龍主任代表接受。
- 10日 ● 臺北市商圈產業聯合會捐贈3,300個空血袋，台北捐血中心主任洪正昇代表受贈。
- 11日 ● 華威影城慶祝在台中開幕一週年，特地結合廣三SOGO百貨舉辦「公益捐血送電影票」活動，廣三SOGO董事長原島榮一響應捐血活動捐出當日第一袋血，台中市副市長蔡炳坤、新聞局長石靜文、文化局長葉樹姍均至現場感謝民眾的愛心，當日共募得194袋血液。
- 14～16日 ● 本會執行長魏昇堂代表出席11月14～16日於北京舉辦的亞太血液連線（APBN）會議。



台南捐血中心club25熱血青年研習營。

- 16日** ● 輸血學會年終學術研討會台北捐血中心共發表4篇口頭報告，分別為板橋站長林冠孝、技術組楊孟樺、成分課陳錦隆及採血課高雅琪；新竹捐血中心共發表3篇口頭報告，分別為主任楊炳炘、技術組長楊婷婷、採血課長吳素姿；台中捐血中心共發表4篇口頭報告，分別為技術組長王萱慧、成分課陳國洲、王祥義；台南捐血中心發表2篇口頭報告，分別為品保組技士黃總環、醫務組護理師李品嬋；高雄捐血中心發表4篇口頭報告，分別為企劃課長葉正弘、供應課技術督導潘玫伶及檢驗課技佐蔡東昇；花蓮捐血中心則由採血課長蔡惠如發表1篇報告。
- 21日** ● 本會首度辦理「與葉金川有約」熱血青年座談會，邀集25位高次數之熱血青年進行年輕族群的捐血座談，獲益匪淺。
- 24日** ● 為追蹤捐血前面談成效，本會完成57個捐血地點神秘客服務稽核調查，包括：6個中心捐血室、11個捐血站及40個定點捐血車（室）；並於今日成果發表及頒獎優良服務人員。

## 12月

- 4日** ● 高雄捐血中心志工團榮獲103年度高雄市衛生保健志願業務考評甲等獎，由志工督導葉正弘代表受獎。
- 5日** ● 台南捐血中心嘉義志工隊陳採眉榮獲全國績優志工金質獎。
- 14日** ● 台南捐血中心雲林志工隊劉明福獲得雲林縣志願服務銅質獎。
- 16日** ● 警廣台中分台及佛光會南屯第一分會16日在台中市黎明社區中正堂前舉辦年度第四場捐血活動，當日並與臺中市政府衛生局合作，針對四大癌症「乳癌、子宮頸



志工參與614世界捐血人日宣傳活動。

癌、大腸癌、口腔癌」，為參與民眾做身體健康檢查，總計共募得3,101袋血液。

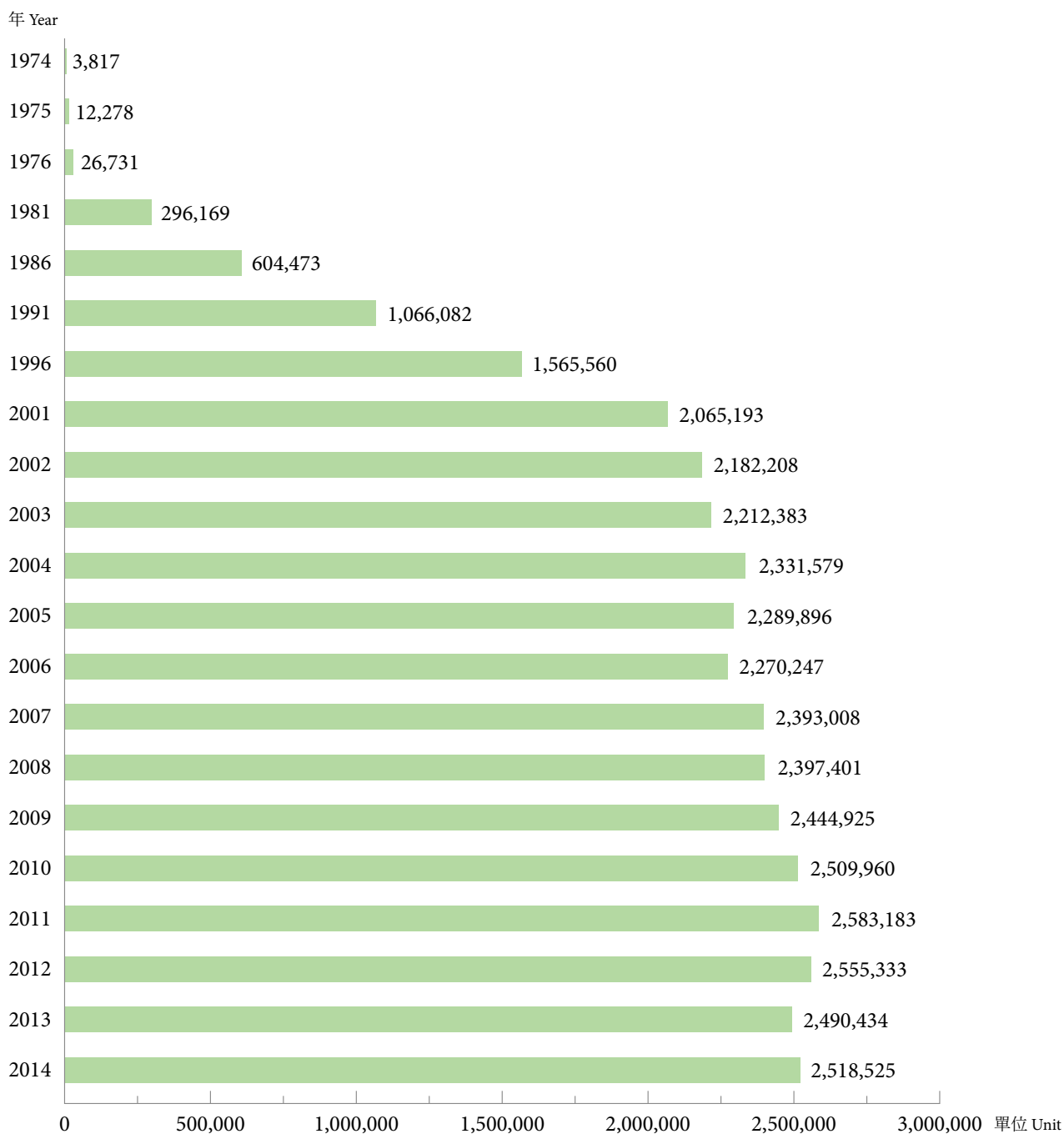
- 18日 ● 臺灣集中保管結算所（股）有限公司捐贈台北捐血中心10,000個空血袋，由企劃課長角志宏代表受贈。
- 19日 ● 台南捐血中心嘉義志工隊張慧子獲嘉義市衛生保健績優志工表揚。
- 23日 ● 財團法人新北市中和廣濟宮捐贈台北捐血中心「廣濟號」血液運送車乙輛，假廣濟宮舉行贈車儀式，由主任洪正昇代表受贈。
- 31日 ● 本會完成各捐血點提供給捐血人使用之WiFi佈建，共103個點，含固定點56個，行動台47個。

# 統計表

## Operation Statistics

## 歷年捐血量趨勢圖

### Annual Blood Collection, 1974-2014



註：

1. 捐血數量為全血及分離術捐血之合計。
2. 全血250ml計為1單位，500ml計為2單位。
3. 分離術血小板每成人劑量為1單位，2倍成人劑量為2單位。

Note:

1. Total blood collection units : calculated by both whole blood and apheresis collection.
2. 250ml per unit for whole blood and 500ml counts for 2 units.
3. Single adult dose per unit for apheresis platelet and double dose counts for 2 units.



## 歷年各捐血中心捐血量

## Annual Blood Collection by Blood Centers, 1974-2014

單位  
Unit

年 Year	中心別 Blood Centers	台 北 捐血中心 Taipei	新 竹 捐血中心 Hsinchu	台 中 捐血中心 Taichung	台 南 捐血中心 Tainan	高 雄 捐血中心 Kaohsiung	花 蓮 捐血中心 Hualien	總 計 Total
1974		3,817						3,817
1975		11,734		544				12,278
1976		22,976		3,539		216		26,731
1981		141,944		58,861	22,535	72,829		296,169
1986		244,830		157,679	75,742	126,222		604,473
1991		421,109		252,561	156,192	205,905	30,315	1,066,082
1996		459,619	220,519	303,393	209,790	295,052	77,187	1,565,560
2001		579,618	294,690	425,953	285,551	381,998	97,383	2,065,193
2002		624,408	307,553	439,269	301,756	406,502	102,720	2,182,208
2003		618,458	313,214	462,180	305,455	411,132	101,944	2,212,383
2004		642,945	333,898	489,079	321,441	437,362	106,854	2,331,579
2005		650,850	320,732	463,553	322,630	429,914	102,217	2,289,896
2006		659,268	322,197	453,015	326,286	403,243	106,238	2,270,247
2007		694,060	338,614	488,984	348,662	413,210	109,478	2,393,008
2008		684,968	342,069	491,754	358,126	413,348	107,136	2,397,401
2009		718,841	326,619	487,230	382,251	420,616	109,368	2,444,925
2010		738,274	343,531	500,298	389,938	423,333	114,586	2,509,960
2011		753,611	347,807	507,104	405,553	453,274	115,834	2,583,183
2012		752,304	343,225	504,362	405,409	434,767	115,266	2,555,333
2013		737,642	336,853	487,170	401,442	414,876	112,451	2,490,434
2014		743,926	337,408	485,767	409,314	431,181	110,929	2,518,525

註：

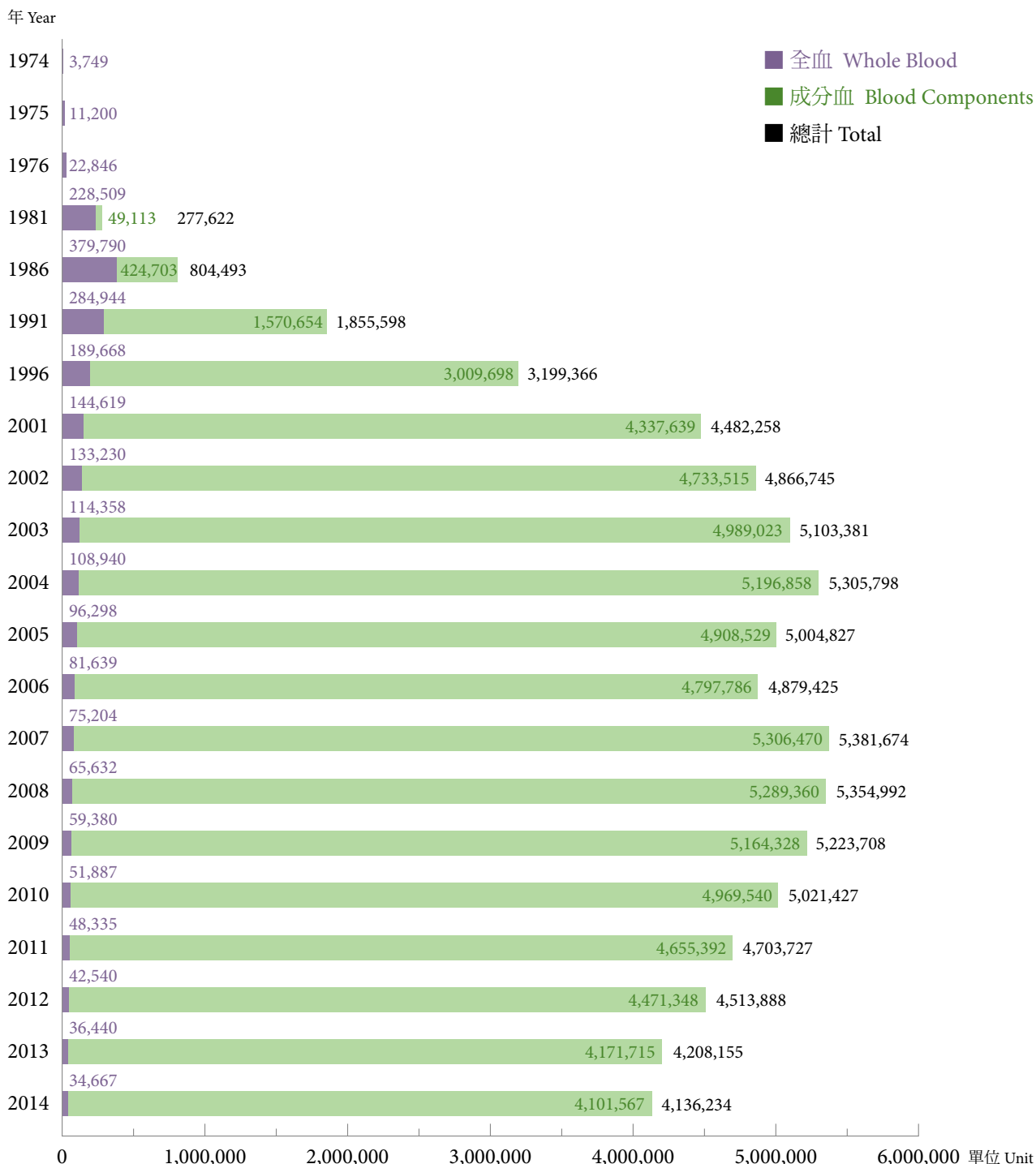
1. 捐血數量為全血及分離術捐血之合計。
2. 全血250ml計為1單位，500ml計為2單位。
3. 分離術血小板每成人劑量為1單位，2倍成人劑量為2單位。

Note:

1. Total blood collection units: calculated by both whole blood and apheresis collection.
2. 250ml per unit for whole blood and 500ml counts for 2 units.
3. Single adult dose per unit for apheresis platelet and double dose counts for 2 units.

## 歷年供血量趨勢圖

### Annual Blood Supply, 1974-2014



註：

1. 全血250ml計為1單位，500ml計為2單位。
2. 成分血供應數量係為不含全血之所有血品供應量。

Note :

1. 250ml per unit for whole blood and 500ml counts for 2 units.
2. Blood component issued: total number of blood issued except whole blood.

## 103年全血及成分血供應量

## Blood and Blood Components Issued in 2014

單位  
Unit

中心別 Blood Centers		台 北 捐血中心 Taipei	新 竹 捐血中心 Hsinchu	台 中 捐血中心 Taichung	台 南 捐血中心 Tainan	高 雄 捐血中心 Kaohsiung	花 蓮 捐血中心 Hualien	總 計 Total
血品 Blood								
紅血球 RBCs	紅血球濃厚液 Packed RBCs	585,486	283,341	393,155	348,173	354,961	94,439	2,059,555
	洗滌紅血球 Washed RBCs	10,158	2,672	3,581	3,480	5,004	450	25,345
	減除白血球之 紅血球濃厚液 Leukocyte-Reduced RBCs	29,684	10,176	36,066	7,340	12,254	5,864	101,384
	冷凍去甘油紅血球 Frozen Thawed Deglycerolized RBCs	6	0	0	0	0	0	6
小計 Subtotal		625,334	296,189	432,802	358,993	372,219	100,753	2,186,290
白血球 WBCs	白血球濃厚液 WBC Concentrate	3,528	120	0	84	2	0	3,734
血小板 Platelets	血小板濃厚液 Platelet Concentrate	60,432	60,272	76,462	49,716	6	1,568	248,456
	分離術血小板 Apheresis Platelets	55,404	19,838	22,433	29,039	27,064	5,988	159,766
	減白分離術血小板 Leukocyte-Reduced Apheresis Platelets	30,314	5,015	12,872	4,034	15,255	2,289	69,779
血漿 Plasma	新鮮冷凍血漿 Fresh Frozen Plasma	265,391	145,471	187,056	183,543	176,018	39,074	996,553
	冷凍血漿 Frozen Plasma	40,877	39,447	29,678	43,223	62,696	22,605	238,526
	冷凍沉澱品 Cryoprecipitate	76,505	19,756	35,150	40,844	17,196	9,012	198,463
	原料血漿（回收） Source Plasma	77,760	38,880	54,432	46,656	53,460	0	271,188
總計 Total		1,235,545	624,988	850,885	756,134	723,916	181,289	4,372,755
全血 Whole Blood		13,131	6,594	6,129	5,742	1,573	1,498	34,667
供應總數 Total Units Issued		1,248,676	631,582	857,014	761,876	725,489	182,787	4,407,422
血液成分占供應總數百分比 Rate of Components		98.95	98.96	99.28	99.25	99.78	99.18	99.21

註：

1. 全血250ml為1單位，500ml為2單位。
2. 成分血供應數量係扣除全血數量後之所有血品數量。

Note：

1. 250ml per unit for whole blood and 500ml counts for 2 units.
2. Blood component issued: total number of blood issued except whole blood.

## 103年各捐血中心每月捐血量

### Monthly Blood Collection by Blood Centers in 2014

單位  
Unit

中心別 Blood Centers 月份 Month	台 北 捐血中心 Taipei	新 竹 捐血中心 Hsinchu	台 中 捐血中心 Taichung	台 南 捐血中心 Tainan	高 雄 捐血中心 Kaohsiung	花 蓮 捐血中心 Hualien	總 計 Total
一月 Jan.	65,226	30,521	44,351	36,542	43,346	9,612	229,598
二月 Feb.	58,166	26,348	36,837	29,891	32,423	7,392	191,057
三月 Mar.	64,266	29,603	46,100	39,951	37,541	11,365	228,826
四月 Apr.	61,556	27,857	39,264	33,975	36,185	8,876	207,713
五月 May	63,265	28,834	38,742	31,914	35,229	8,668	206,652
六月 Jun.	64,024	28,970	42,847	34,663	36,438	10,625	217,567
七月 Jul.	62,679	28,611	38,558	33,390	35,111	8,637	206,986
八月 Aug.	66,377	29,130	43,999	36,643	39,795	10,573	226,517
九月 Sept.	56,506	25,646	34,792	28,799	31,741	7,602	185,086
十月 Oct.	61,840	27,947	41,560	37,108	34,163	9,616	212,234
十一月 Nov.	60,029	27,632	40,003	35,233	35,261	9,558	207,716
十二月 Dec.	59,992	26,309	38,714	31,205	33,948	8,405	198,573
總計 Total	743,926	337,408	485,767	409,314	431,181	110,929	2,518,525

註：

1. 捐血量為全血及分離術捐血之合計。
2. 全血250ml為1單位，500ml為2單位。
3. 分離術血小板每成人劑量為1單位，2倍劑量為2單位。

Note:

1. Total blood collection units: calculated by both whole blood and apheresis collection.
2. 250ml per unit for whole blood and 500ml counts for 2 units.
3. Single adult dose per unit for apheresis platelet and double dose counts for 2 units.

## 近五年每千人口國民全血捐血量

### Whole Blood Collection per 1,000 Head of Population, 2010-2014

年份 Year	中心別 Blood Centers 項目 Item	台 北 捐血中心 Taipei	新 竹 捐血中心 Hsinchu	台 中 捐血中心 Taichung	台 南 捐血中心 Tainan	高 雄 捐血中心 Kaohsiung	花 蓮 捐血中心 Hualien	總 計 Total
2010	捐血量（升） Blood Collection	166,138	81,744	120,517	90,927	96,025	27,055	582,405
	轄區人口數 Population	6,974,554	3,499,663	4,477,114	3,409,906	3,745,132	1,032,012	23,138,381
	每千國民平均捐血量 （公升） Liter/1,000 population	23.82	23.36	26.92	26.67	25.64	26.22	25.17
2011	捐血量（升） Blood Collection	168,680	81,785	120,913	93,291	102,674	27,168	594,511
	轄區人口數 Population	7,054,442	3,498,987	4,484,098	3,400,813	3,737,885	1,026,326	23,202,551
	每千國民平均捐血量 （公升） Liter/1,000 population	23.91	23.37	26.96	27.43	27.47	26.47	25.62
2012	捐血量（升） Blood Collection	167,283	80,345	118,749	92,669	98,441	25,880	583,367
	轄區人口數 Population	7,086,152	3,525,575	4,496,195	3,397,242	3,734,579	1,021,830	23,261,573
	每千國民平均捐血量 （公升） Liter/1,000 population	23.61	22.79	26.41	27.28	26.36	25.33	25.08
2013	捐血量（升） Blood Collection	163,347	78,323	113,190	91,759	93,637	25,359	565,613
	轄區人口數 Population	7,131,766	3,555,325	4,510,598	3,394,334	3,733,713	1,018,477	23,344,213
	每千國民平均捐血量 （公升） Liter/1,000 population	22.9	22.03	25.09	27.03	25.08	24.9	24.23
2014	捐血量（升） Blood Collection	164,463	78,068	112,667	93,876	97,458	25,009	571,541
	轄區人口數 Population	7,160,559	3,579,347	4,517,652	3,388,101	3,728,935	1,017,442	23,392,036
	每千國民平均捐血量 （公升） Liter/1,000 population	22.97	21.81	24.94	27.71	26.14	24.58	24.43

註：

1. 人口數依內政部戶政司統計以每年6月30日實有數為準。
2. 全血每單位以250ml計算。

Note：

1. Mid-year population, data from the ministry of interior.
2. 250ml per unit for whole blood.



## 近五年捐血人次及國民捐血率

### Blood Donation by Blood Centers, 2010-2014

年份 Year	中心別 Blood Centers 項目 Item	台 北 捐血中心 Taipei	新 竹 捐血中心 Hsinchu	台 中 捐血中心 Taichung	台 南 捐血中心 Tainan	高 雄 捐血中心 Kaohsiung	花 蓮 捐血中心 Hualien	總 計 Total
2010	捐血人次 Blood Donation	531,254	255,439	372,360	291,710	313,490	84,989	1,849,242
	轄區人口數 Population	6,974,554	3,499,663	4,477,114	3,409,906	3,745,132	1,032,012	23,138,381
	國民捐血率 Donation Rate	7.62%	7.30%	8.32%	8.55%	8.37%	8.24%	7.99%
2011	捐血人次 Blood Donation	534,349	254,731	377,883	303,895	329,804	85,445	1,886,107
	轄區人口數 Population	7,054,442	3,498,987	4,484,098	3,400,813	3,737,885	1,026,326	23,202,551
	國民捐血率 Donation Rate	7.57%	7.28%	8.43%	8.94%	8.82%	8.33%	8.13%
2012	捐血人次 Blood Donation	526,216	248,420	371,259	304,184	300,906	83,536	1,834,521
	轄區人口數 Population	7,086,152	3,525,575	4,496,195	3,397,242	3,734,579	1,021,830	23,261,573
	國民捐血率 Donation Rate	7.43%	7.05%	8.26%	8.95%	8.06%	8.18%	7.89%
2013	捐血人次 Blood Donation	513,907	241,765	351,790	294,771	278,740	79,992	1,760,965
	轄區人口數 Population	7,131,766	3,555,325	4,510,598	3,394,334	3,733,713	1,018,477	23,344,213
	國民捐血率 Donation Rate	7.21%	6.80%	7.80%	8.68%	7.47%	7.85%	7.54%
2014	捐血人次 Blood Donation	509,548	239,797	345,234	295,028	287,690	76,822	1,754,119
	轄區人口數 Population	7,160,559	3,579,347	4,517,652	3,388,101	3,728,935	1,017,442	23,392,036
	國民捐血率 Donation Rate	7.12%	6.70%	7.64%	8.71%	7.72%	7.55%	7.50%

註：

1. 人口數依內政部戶政司統計以每年6月30日實有數為準。
2. 全血捐血方式及分離術捐血方式均列入計算。

**Note:**

1. Mid-year population, data from the ministry of interior.
2. Both whole blood and apheresis donations are included.

## 103年捐血類型分析

## Types of Blood Donation: Whole Blood vs. Platelet Apheresis in 2014

單位  
Unit

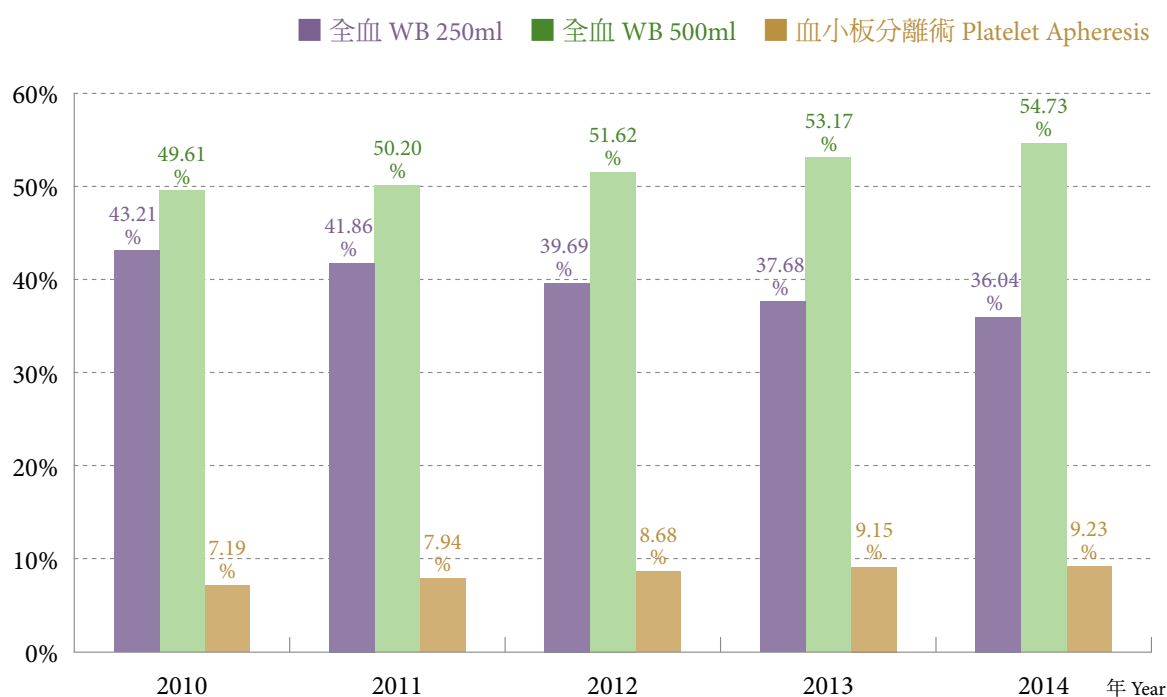
年度 Year	類型 Type	全血 Whole blood				小計 Subtotal	分離術捐血 Apheresis		總計 Total
		250ml	百分比 Rate	500ml	百分比 Rate		分離術捐血 Apheresis	百分比 Rate	
	台北捐血中心 Taipei	239,149	32.15%	418,704	56.28%	657,853	86,073	11.57%	743,926
	新竹捐血中心 Hsinchu	125,506	37.20%	186,766	55.35%	312,272	25,136	7.45%	337,408
	台中捐血中心 Taichung	194,789	40.10%	255,878	52.68%	450,667	35,100	7.23%	485,767
	台南捐血中心 Tainan	164,173	40.11%	211,332	51.63%	375,505	33,809	8.26%	409,314
	高雄捐血中心 Kaohsiung	144,199	33.44%	245,634	56.97%	389,833	41,348	9.59%	431,181
	花蓮捐血中心 Hualien	39,946	36.01%	60,088	54.17%	100,034	10,895	9.82%	110,929
	小計 Subtotal	907,762	36.04%	1,378,402	54.73%	2,286,164	232,361	9.23%	2,518,525

註：每單位以250ml計算。

Note: 250ml per unit.

## 近五年捐血類型分析

## Whole Blood vs. Platelet Apheresis, 2010-2014



## 近五年500毫升捐血佔全血人次百分比

### Whole Blood Donation Rate by 500ml, 2010-2014

年份 Year	項目 Item	中心別 Blood Centers	台 北 捐血中心 Taipei	新 竹 捐血中心 Hsinchu	台 中 捐血中心 Taichung	台 南 捐血中心 Tainan	高 雄 捐血中心 Kaohsiung	花 蓮 捐血中心 Hualien	總 計 Total
2010	500毫升捐血人次 500ml Blood Donation		188,595	86,982	124,331	92,238	102,509	27,922	622,577
	全血捐血人次 Whole Blood Donation		475,956	239,992	357,736	271,470	281,589	80,298	1,707,041
	占全血捐血人次百分比 % of 500ml Whole Blood Donations		39.62%	36.24%	34.75%	33.98%	36.40%	34.77%	36.47%
2011	500毫升捐血人次 500ml Blood Donation		197,849	90,362	124,561	94,016	112,939	28,650	648,377
	全血捐血人次 Whole Blood Donation		476,872	236,777	359,089	279,148	297,758	80,023	1,729,667
	占全血捐血人次百分比 % of 500ml Whole Blood Donations		41.49%	38.16%	34.69%	33.68%	37.93%	35.80%	37.49%
2012	500毫升捐血人次 500ml Blood Donation		203,374	91,627	125,776	93,284	116,992	28,521	659,574
	全血捐血人次 Whole Blood Donation		465,757	229,754	349,220	277,393	276,770	74,999	1,673,893
	占全血捐血人次百分比 % of 500ml Whole Blood Donations		43.67%	39.88%	36.02%	33.63%	42.27%	38.03%	39.40%
2013	500毫升捐血人次 500ml Blood Donation		200,638	91,306	125,092	98,812	117,175	29,047	662,070
	全血捐血人次 Whole Blood Donation		452,749	221,984	327,667	268,223	257,372	72,387	1,600,382
	占全血捐血人次百分比 % of 500ml Whole Blood Donations		44.32%	41.13%	38.18%	36.84%	45.53%	40.13%	41.37%
2014	500毫升捐血人次 500ml Blood Donation		209,352	93,383	127,939	105,666	122,817	30,044	689,201
	全血捐血人次 Whole Blood Donation		448,501	218,889	322,728	269,839	267,016	69,990	1,596,963
	占全血捐血人次百分比 % of 500ml Whole Blood Donations		46.68%	42.66%	39.64%	39.16%	46.00%	42.93%	43.16%

## 103年首次捐血人數及所占比率 New Donors Recruitment in 2014

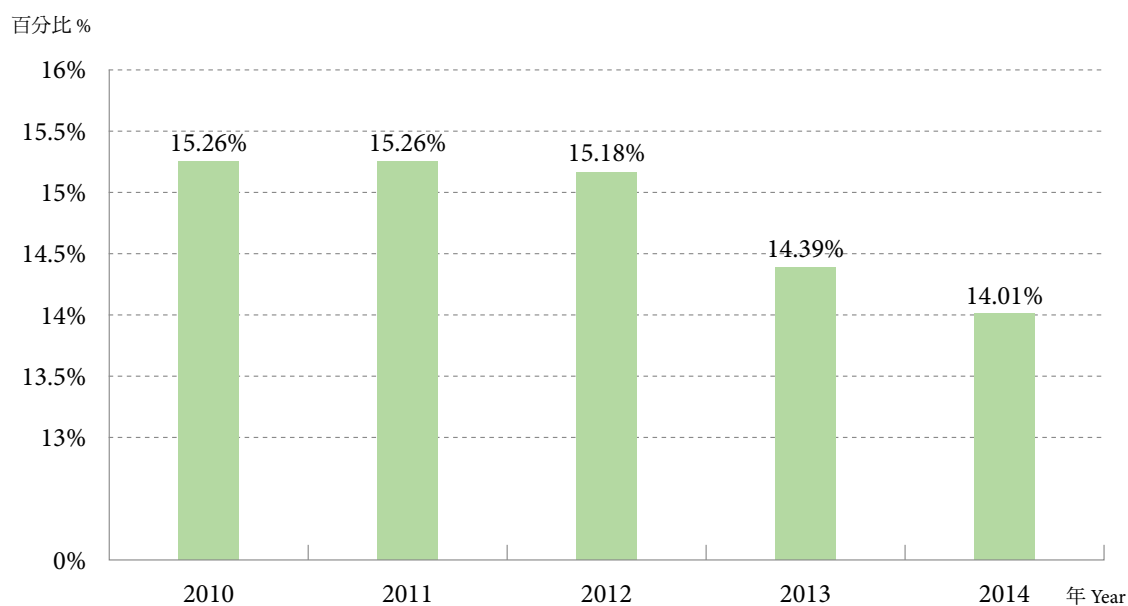
人數  
Donor

首次捐血人 New Donors	中心別 Blood Centers	台 北 捐血中心 Taipei	新 竹 捐血中心 Hsinchu	台 中 捐血中心 Taichung	台 南 捐血中心 Tainan	高 雄 捐血中心 Kaohsiung	花 蓮 捐血中心 Hualien	總 計 Total
≤24歲人數 Age ≤24		21,099	13,827	20,328	25,246	17,693	6,020	104,213
百分比 Rate (%)		7.22%	9.60%	9.54%	14.05%	10.49%	12.85%	9.98%
>25歲人數 Age >25		13,914	6,149	8,057	6,480	5,804	1,734	42,138
百分比 Rate (%)		4.76%	4.27%	3.78%	3.61%	3.44%	3.70%	4.03%
首次捐血人數 New Donors		35,013	19,976	28,385	31,726	23,497	7,754	146,351
捐血總人數 Total Donors		292,386	143,998	213,002	179,652	168,665	46,851	1,044,554
首次捐血率 New Donors Rate		11.97%	13.87%	13.33%	17.66%	13.93%	16.55%	14.01%

註：捐血總人數係指當年內捐血人數總和，同一人捐血數次，皆以1人計。

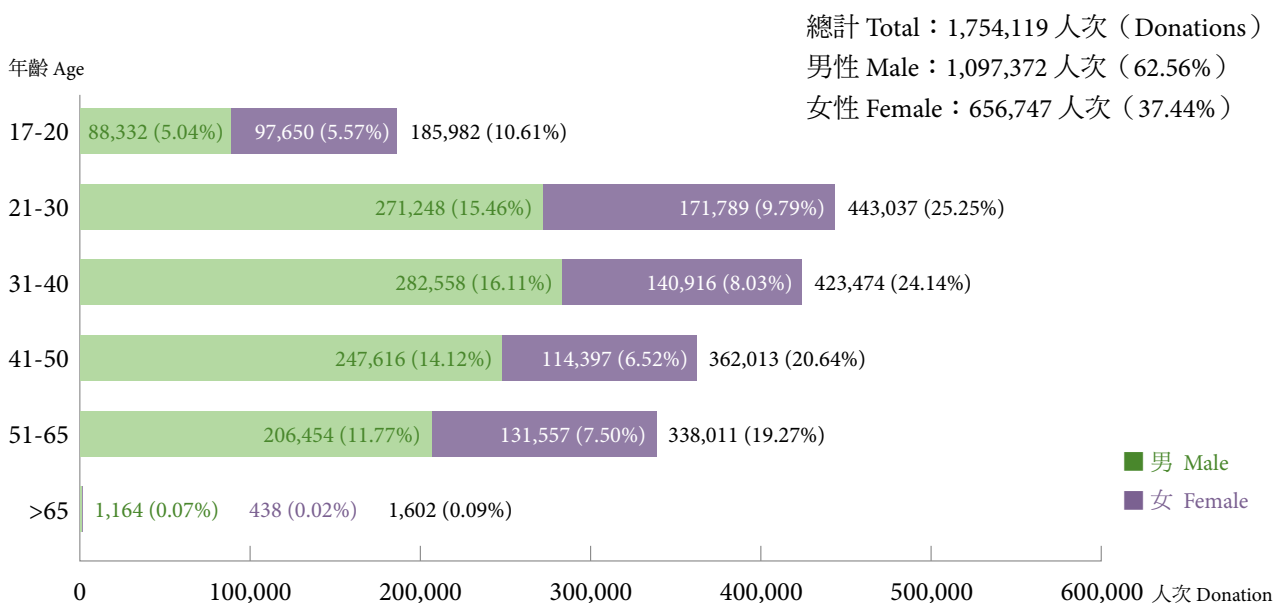
Note: total donors refer to the sum of individuals donating blood one or more times in the year.

## 近五年首次捐血趨勢變化 Variation of New Donors Rate, 2010-2014



## 103年捐血年齡／性別人次及所占比率

### Distribution of Donations by Gender and Age in 2014



註：全血捐血及分離術捐血均列入計算。

Note: both whole blood and apheresis donations are included.

## 近五年捐血人年齡趨勢

### Distribution of Donations by Age, 2010-2014



註：全血捐血及分離術捐血均列入計算。

Note: both whole blood and apheresis donations are included.



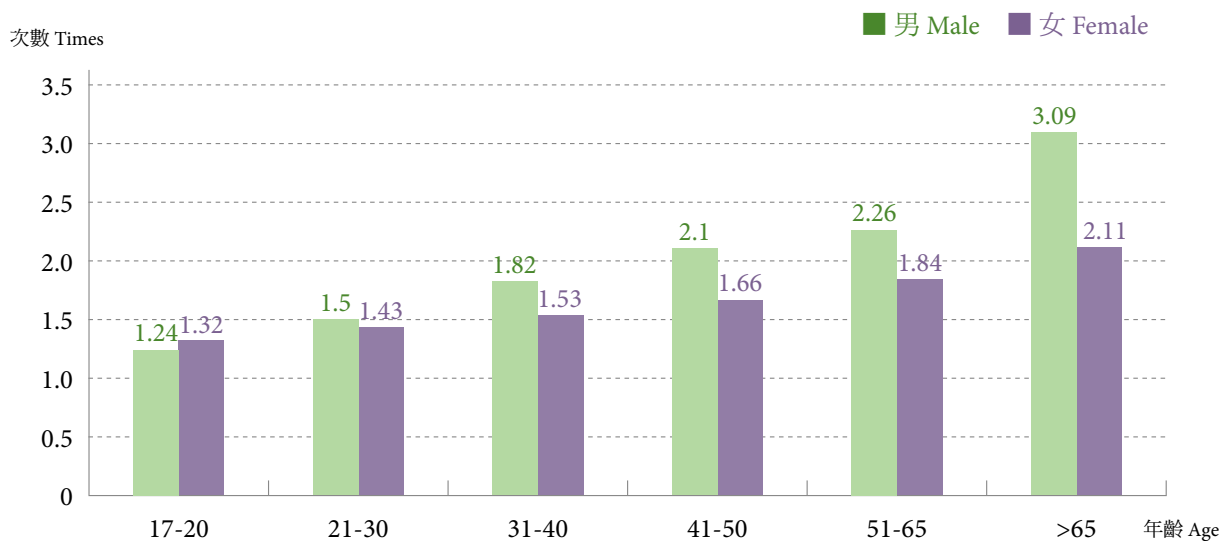
## 103年各年齡層／性別捐血次數

## Donation Frequency by Gender and Age in 2014

年齡 Age	中心別 Blood Centers	台 北 捐血中心 Taipei	新 竹 捐血中心 Hsinchu	台 中 捐血中心 Taichung	台 南 捐血中心 Tainan	高 雄 捐血中心 Kaohsiung	花 蓮 捐血中心 Hualien	平均捐血次數 Donation Times	
	性別 Gender								
17-20	男 Male	1.24	1.19	1.25	1.22	1.28	1.26	1.24	1.28
	女 Female	1.29	1.24	1.30	1.35	1.38	1.28	1.32	
21-30	男 Male	1.53	1.47	1.44	1.50	1.54	1.48	1.50	1.47
	女 Female	1.43	1.39	1.43	1.44	1.50	1.43	1.43	
31-40	男 Male	1.83	1.74	1.76	1.86	1.88	1.85	1.82	1.71
	女 Female	1.52	1.49	1.51	1.51	1.61	1.53	1.53	
41-50	男 Male	2.18	2.07	1.97	2.12	2.13	2.10	2.10	1.94
	女 Female	1.66	1.67	1.62	1.63	1.75	1.65	1.66	
51-65	男 Male	2.45	2.25	2.04	2.29	2.18	2.18	2.26	2.08
	女 Female	1.89	1.88	1.76	1.77	1.89	1.84	1.84	
>65	男 Male	3.84	2.85	3.38	2.30	2.68	3.71	3.09	2.74
	女 Female	2.42	1.71	1.89	1.44	2.50	2.50	2.11	
小計 Subtotal	男 Male	1.89	1.76	1.69	1.72	1.79	1.72	1.78	1.68
	女 Female	1.56	1.52	1.52	1.50	1.59	1.52	1.54	
總計 Total		1.74	1.67	1.62	1.64	1.71	1.64	1.68	

## 103年捐血人性別／年齡層／平均捐血次數趨勢圖

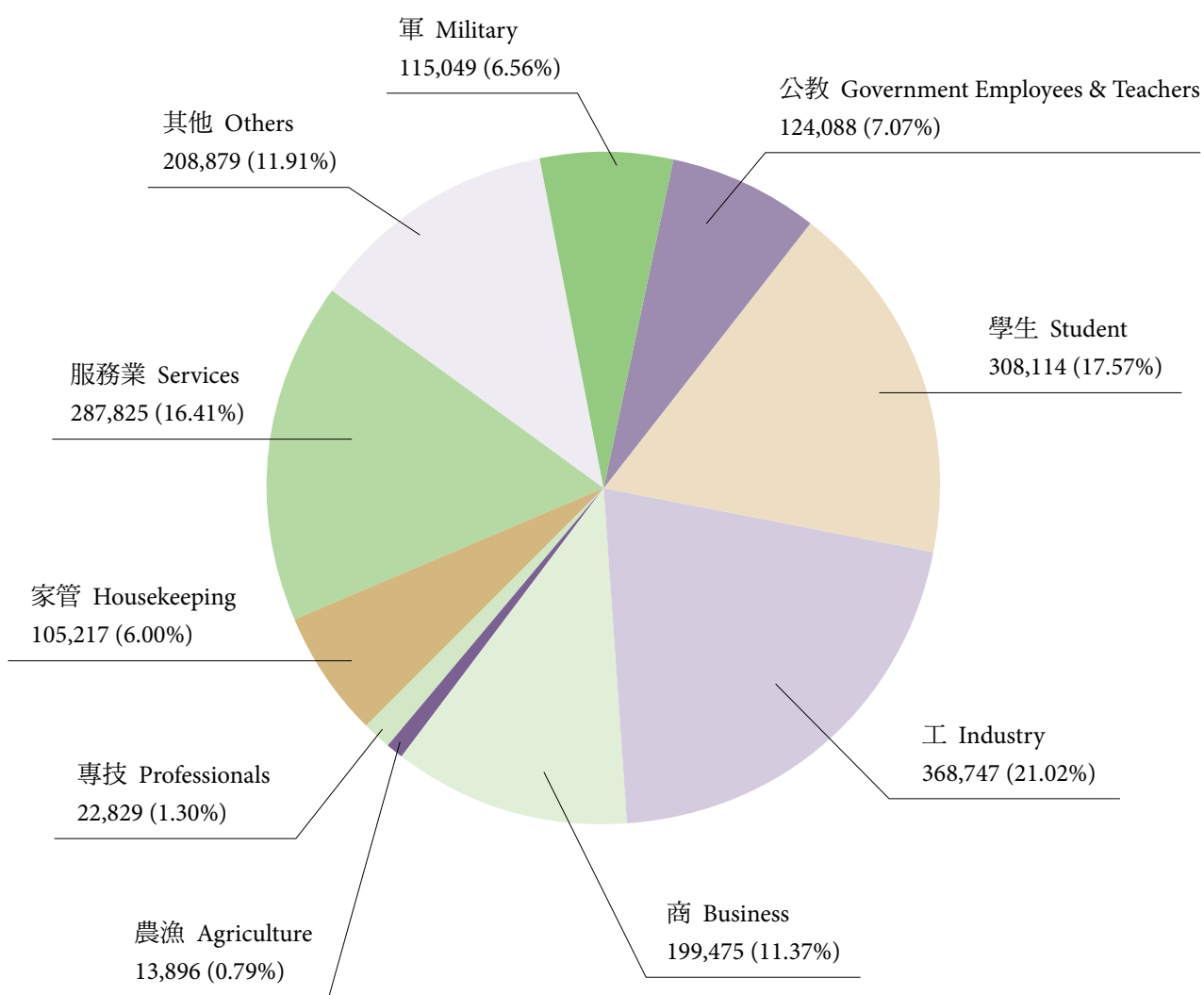
## Donation Frequency by Gender and Age in 2014



## 103年捐血人職業統計

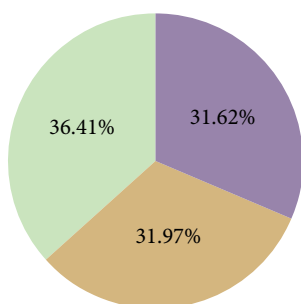
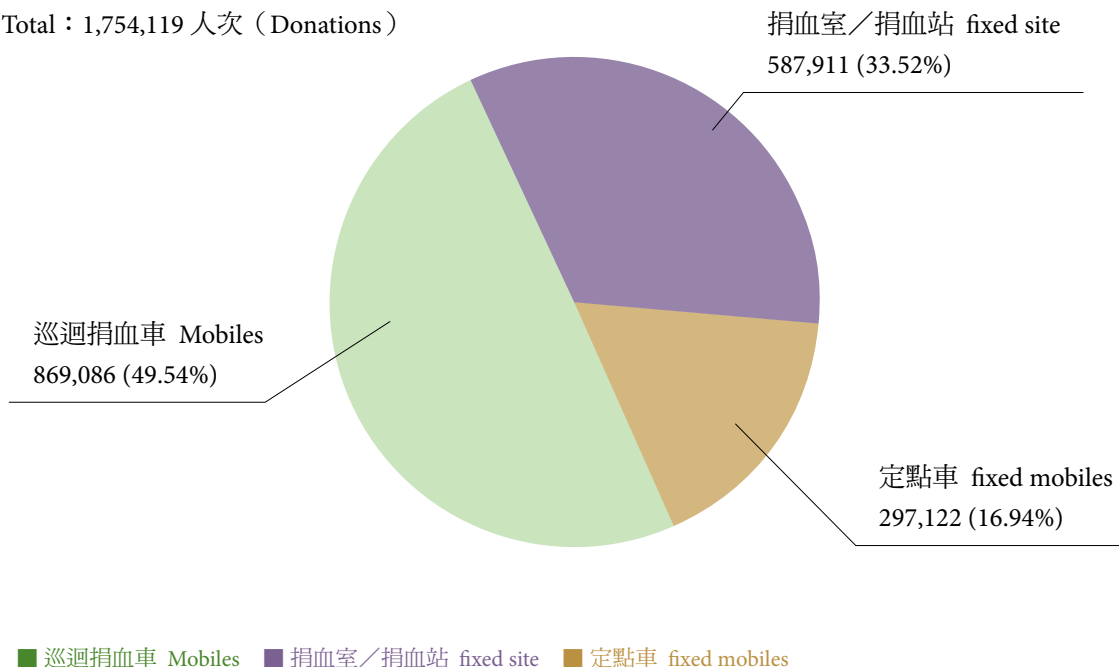
### Occupational Distribution of Donors in 2014

總計 Total : 1,754,119 人次 (Donations)

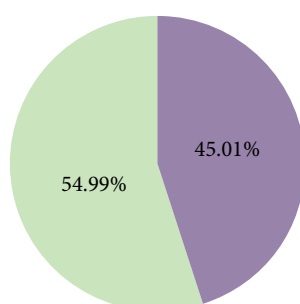


## 103年捐血地點分析 Blood Collection by Sites in 2014

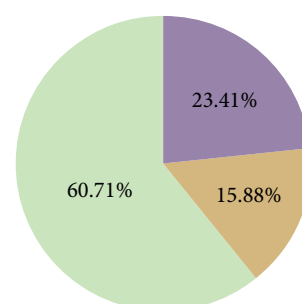
總計 Total : 1,754,119 人次 (Donations)



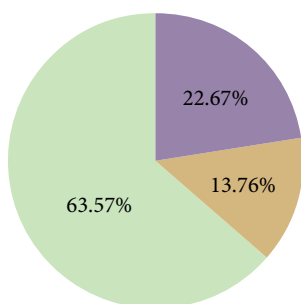
台北捐血中心  
Taipei



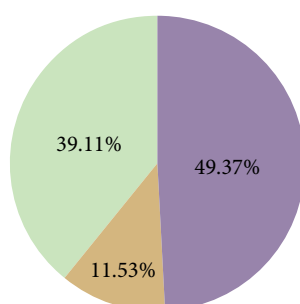
新竹捐血中心  
Hsinchu



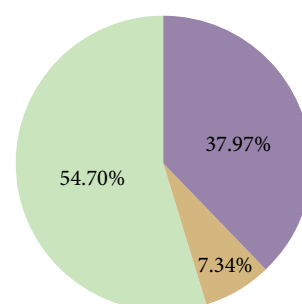
台中捐血中心  
Taichung



台南捐血中心  
Tainan



高雄捐血中心  
Kaohsiung



花蓮捐血中心  
Hualien

## 103年捐血前體檢不合格

### Pre-Donation Donor Deferral in 2014

中心別 Blood Centers 不合格原因 Reasons of Deferral		台 北 捐血中心 Taipei	新 竹 捐血中心 Hsinchu	台 中 捐血中心 Taichung	台 南 捐血中心 Tainan	高 雄 捐血中心 Kaohsiung	花 蓮 捐血中心 Hualien	總 計 Total
1	血紅素不足 Low Hemoglobin	41,192	11,266	19,777	20,923	16,961	7,874	117,993
2	血壓過高、過低 Blood Pressure too High or too Low	12,608	2,565	6,636	3,297	4,326	995	30,427
3	服用阿斯匹靈或其他藥物 Aspirin or other medications	8,565	3,586	3,805	3,915	4,258	1,217	25,346
4	D檔、W檔、R檔、Q檔 Temporary Deferral	7,640	918	7,757	1,497	5,120	375	23,307
5	捐血間隔未滿 Interval of Donations	5,281	274	6,747	185	4,133	18	16,638
6	睡眠不足 Lack of Sleeping	3,394	1,182	3,071	2,199	1,746	324	11,916
7	身體不適，正在醫療中 Under Medical Treatment	4,591	226	2,862	1,470	793	385	10,327
8	曾接受過輸血或外科手術 Recipient of Blood or Surgery	2,345	1,075	1,511	1,873	920	394	8,118
9	危險性行為者 High-Risk Sexual Behaviors	2,825	237	2,984	665	640	62	7,413
10	一年內出國，前往限制地區者 Abroad Within Past 1 Year	2,369	613	1,592	673	264	293	5,804
11	體重不足 Low Body Weigh	2,046	538	1,079	541	1,030	312	5,546
12	最近接受預防接種 Vaccinations	2,155	740	786	1,078	587	166	5,512
13	月經期間 Menstruation	2,048	415	1,525	640	451	94	5,173
14	曾拔牙、穿耳洞、紋身 Acupuncture, Dental Extraction	1,285	1,035	1,024	739	383	295	4,761
15	曾有心臟、腎臟、肺臟等 疾病或惡性腫瘤 Heart, Kidney, Lung Disease or Cancer	1,706	451	401	1,689	117	138	4,502
16	其他 Other Abnormalities	11,601	3,272	8,527	3,748	5,111	1,217	33,476
不合格人次數 Deferred Donations		111,651	28,393	70,084	45,132	46,840	14,159	316,259
捐血總人次數 Total Donations		621,199	268,190	415,318	340,160	334,530	90,981	2,070,378
占捐血總人次數百分比 % of Deferred Donations		17.97%	10.59%	16.87%	13.27%	14.00%	15.56%	15.28%

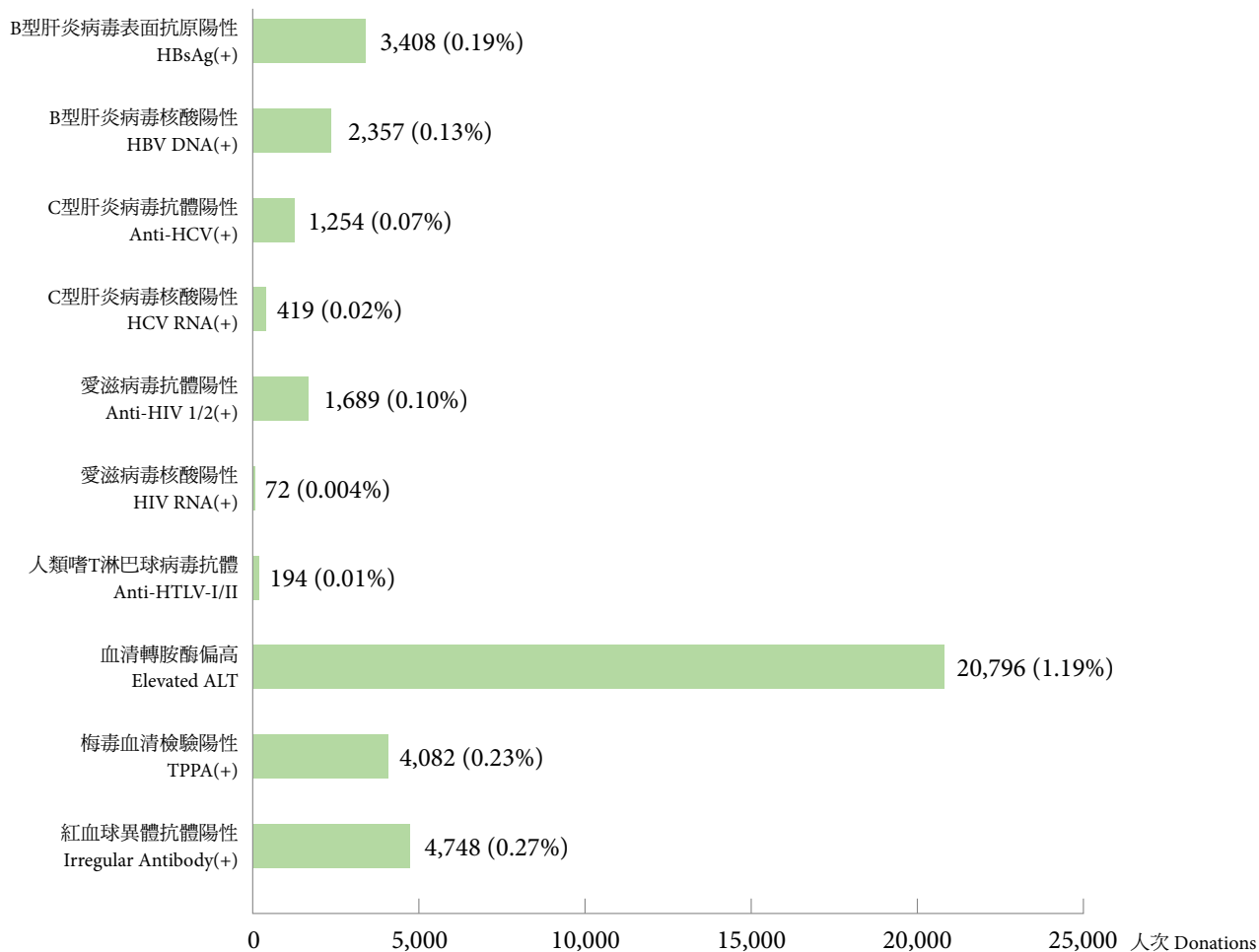
註：捐血總人次數：係包括捐血前不合格人次及實際捐血人次數。

Note: total attended donations: total number of donors who attended to donate but were deferred and those who succeed to donate.

## 103年血液檢驗不合格統計

### Blood Screening in 2014

總計 Total : 1,754,119 人次 (Donations)





## 103年ABO及Rh血型總數及比例

### Statistics of ABO and Rh in 2014

人次  
Donation

血型 Blood Group	Rh+	Rh-	合計 Total	百分比 Percentage
<b>A</b>	465,922	2,006	467,928	26.68%
<b>B</b>	413,290	1,761	415,051	23.66%
<b>O</b>	765,346	3,159	768,505	43.81%
<b>AB</b>	102,159	476	102,635	5.85%
合計 Total	1,746,717	7,402	1,754,119	
百分比 Percentage	99.58%	0.42%		

## 103年ABO亞型資料庫

### Statistics of ABO subgroups in 2014

人次  
Donation

A亞型 A subgroups		B亞型 B subgroups		AB亞型 AB subgroups		亞孟買型 Para-Bombay	
<b>A<sub>2</sub></b>	3	<b>B<sub>3</sub></b>	663	<b>A<sub>1</sub>B<sub>3</sub></b>	141	<b>O<sub>Hm</sub><sup>AB</sup></b>	11
<b>A<sub>3</sub></b>	3	<b>B<sub>el</sub></b>	47	<b>A<sub>2</sub>B</b>	151	<b>O<sub>Hm</sub><sup>A</sup></b>	66
<b>A<sub>el</sub></b>	103	<b>B<sub>m</sub></b>	2	<b>A<sub>3</sub>B</b>	8	<b>O<sub>Hm</sub><sup>B</sup></b>	61
<b>A<sub>m</sub></b>	4			<b>AB<sub>3</sub></b>	68	<b>O<sub>Hm</sub></b>	51
<b>A<sub>x</sub></b>	1			<b>AB<sub>el</sub></b>	4		
				<b>A<sub>el</sub>B</b>	12		
				<b>cisAB</b>	3		

## 稀有血型冷凍紅血球庫存數量（至103年12月31日）

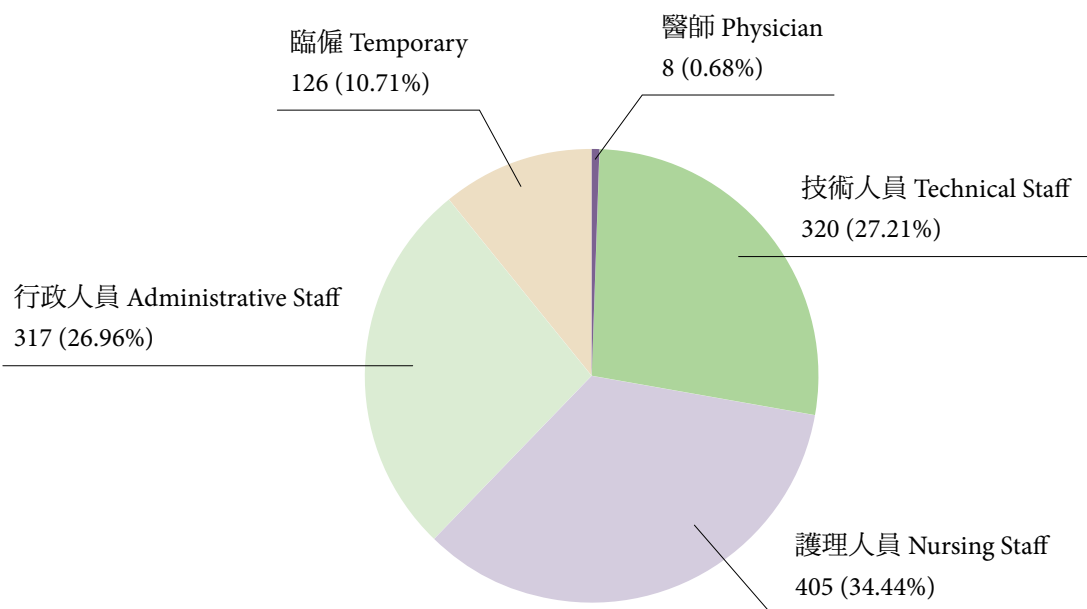
## Inventory of Rare RBCs (till 31 December, 2014)

血型組合 Blood groups		數量 Unit
稀有血型 Rare blood groups	ABO血型 ABO blood groups	
s(-)	A	2
	O	41
RzRz	B	2
	O	32
	AB	4
Lu(a-b-)	A	8
	O	17
ko	A	14
Fy(a-b+)	A	9
	B	7
	O	71
	AB	4
Fy(a-b-)	O	3
Jk(a-b-)	A	10
	B	9
	O	30
	AB	1
Dia(a+b-)	A	4
	O	24
i adult cell	A	14
	B	5
	O	4
	AB	1
p(-)	A	5
	B	1
Jr(a-)	O	6

## 103年本會及各捐血中心人員配賦 Human Resources in 2014

人數  
Person

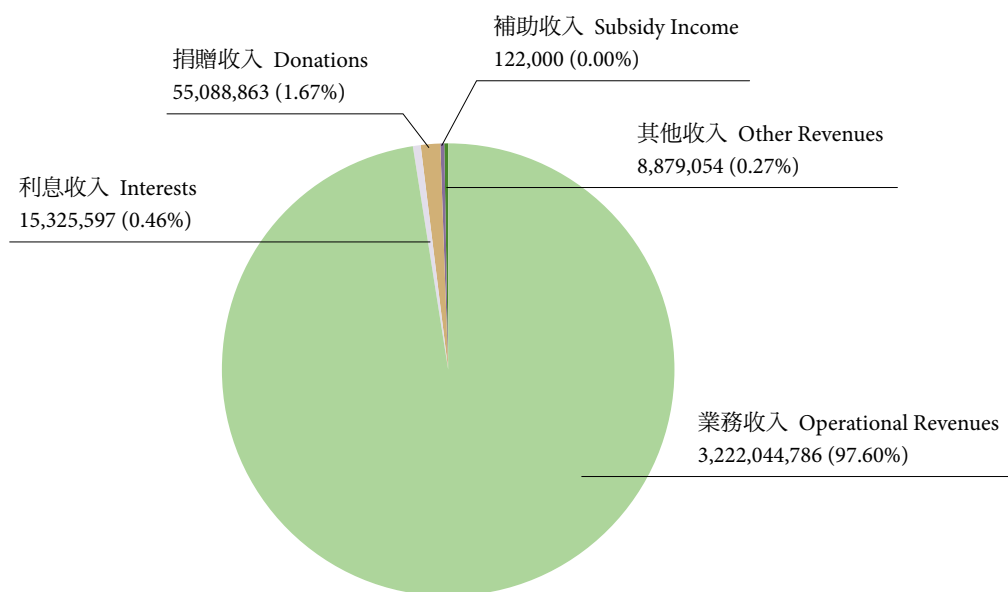
區 分 Classification	醫 師 Physician	技術人員 Technical Staff	護理人員 Nursing Staff	行政人員 Administrative Staff	臨 僱 Temporary	總 計 Total
基金會 Head Office	0	9	0	26	1	36
台北捐血中心 Taipei	2	113	125	86	41	367
新竹捐血中心 Hsinchu	1	43	41	45	4	134
台中捐血中心 Taichung	1	41	77	57	17	193
台南捐血中心 Tainan	2	38	74	50	24	188
高雄捐血中心 Kaohsiung	1	65	65	36	31	198
花蓮捐血中心 Hualien	1	11	23	17	8	60
總 計 Total	8	320	405	317	126	1,176



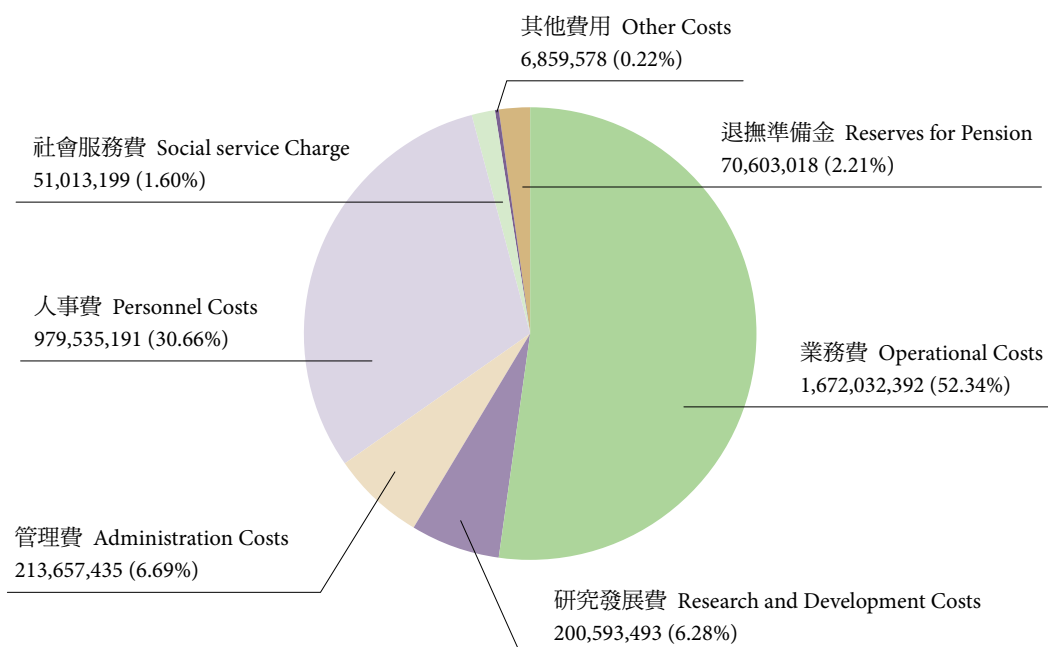
## 103年經費收支

## Incomes and Expenditures in 2014

## 一、經費總收入Total Incomes : NT\$ 3,301,460,300



## 二、經常門支出Total Expenditures : NT\$ 3,194,294,306



## 三、經常門結餘Balance : NT\$ 107,165,994

## 四、資本門支出Capital expenditures : NT\$ 62,982,303 (設備購置)





# 附錄

## Appendix

# 全國捐血地點通訊一覽表

Address and  
Telephone

地 點	服務時間	電 話	地 址
中華捐血運動協會	08:00~17:00	02-2351-1600	臺北市中正區南海路3號3樓
台灣血液基金會			

## 台北捐血中心 業務轄區：臺北市、新北市、基隆市、金門、馬祖

地 點	服務時間	電 話	地 址
台北捐血中心	08:00~17:00	02-2897-1600	臺北市北投區立德路123號 (近捷運忠義站)
捐 血 站			
基隆捐血站	08:00~18:00	02-2427-8500	基隆市信義區信一路14號1樓
板橋捐血站	08:00~18:00	02-2952-4117	新北市板橋區中山路一段50巷36號 2樓之4 (近捷運府中站2號出口)
捐 血 室			
關渡捐血室	08:00~17:00	02-2897-1600 分機6141	臺北市北投區立德路123號 (近捷運忠義站)
南海捐血室	08:00~17:30	02-2351-1601	臺北市中正區南海路1號3樓 (近捷運中正紀念堂站1號出口)
市府捐血室	09:00~17:00 (週日不作業)	02-2720-8889 分機3383	臺北市信義區市府路1號 (台北市政府西大門左側，近捷運 市政府站2號出口)(台北101/世 貿站4號出口)
長春捐血室	09:00~17:30 (週日不作業)	02-2731-4801	臺北市松山區復興北路69號5樓 (近捷運南京復興站5號出口)
三重捐血室	09:00~17:00 (週六不作業)	02-2986-2780	新北市三重區重新路三段81號3樓 (近捷運菜寮站3號出口)
汐止捐血室	09:00~17:00 (週六不作業)	02-2642-8013	新北市汐止區新台五路一段234號6 樓之1

地 點	服務時間	電 話	地 址
新店捐血室	09:00～17:00	02-2218-8867	新北市新店區民權路95號6樓之2 (近捷運大坪林站1號出口)
捷運台北站捐血室	10:00～18:00 (週三不作業)	02-2370-6880	臺北捷運台北車站地下1樓，M7出口 (誠品書店旁)
定 點 車			
台大號捐血車	09:00～17:00	02-2364-4952	臺北市大安區新生南路三段 (台灣大學側門口，近捷運公館站3號出口)
忠孝號捐血車	11:00～19:00 (週一不作業)	02-2751-2351	臺北市大安區大安路一段瑠公公園旁 (忠孝復興站4號出口)、(往東區地下街14號出口)
公園號捐血車	10:00～18:00 (週二不作業)	02-2381-1268	臺北市中正區228和平公園內 (襄陽路與公園路口，近捷運台大醫院站4號出口)
峨嵋號捐血車	13:00～21:00	02-2375-1189	臺北市萬華區峨嵋街83號 (峨嵋街立體停車場旁，近捷運西門站6號出口)
新光站前號捐血車	11:00～19:00 (為配合新光三越百貨公司活動 不定期取消)	0961-236-683	臺北市中正區忠孝西路一段66號 (新光摩天大樓廣場前、新光三越站前店、捷運台北車站M6出口)
新莊號捐血車	10:00～18:00 (週五不作業)	02-8994-1488	新北市新莊區中華路一段與復興路一段 交叉口，新莊綜合運動場旁 (近捷運新莊站1號出口)
中和號捐血車	09:00～17:00 (週六、日不作業)	02-2929-9437	新北市中和區中安街85號(國立中央圖書館旁823公園內，近捷運永安市場站)
土城號捐血車	09:00～17:00 (週六、日不作業)	02-8262-5140	新北市土城區裕民路171巷裕民廣場內 (近捷運海山站3號出口)

## 新竹捐血中心 業務轄區：桃園市、新竹縣、新竹市、苗栗縣

地 點	服務時間	電 話	地 址
新竹捐血中心	08:00～17:00	03-555-6111	新竹縣竹北市光明11路215巷8號
捐 血 站			
桃園捐血站	08:00～18:00	03-332-7651	桃園市桃園區文康街61號 (西門國小地下停車場旁)
苗栗捐血站	08:00～18:00	037-274-980	苗栗市為公路282號
捐 血 室			
愛心樓捐血室	08:00～17:00	03-551-7113	新竹縣竹北市光明11路215巷8號
長庚捐血室	09:00～17:30 (週日及國定假日不作業)	03-396-0749	桃園市龜山區公西村復興街5號 (林口長庚醫院醫學大樓地下1樓 美食街旁)
中壢捐血室	09:00～18:00	03-427-8452	桃園市中壢區復興路117號2樓 (復興路與中平路交叉口)
西大捐血室	09:30～17:30	03-521-3354	新竹市西大路559號 (市立棒球場大門旁)
頭份捐血室	09:00～17:00 (週二、四不作業)	037-682-883	苗栗縣頭份鎮仁愛路116號 (為恭醫院中醫部旁)

## 台中捐血中心      業務轄區：臺中市、彰化縣、南投縣

地 點	服務時間	電 話	地 址
台中捐血中心	08:00～17:00	04-246-12345	臺中市西屯區臺灣大道四段1176號
捐 血 站			
彰化捐血站	08:00～18:00	04-711-0313	彰化市中山路一段348號
埔里捐血站	08:00～18:00	049-298-1019	南投縣埔里鎮北環路222號
捐 血 室			
中港捐血室	08:00～18:00	04-246-12345 分機101	臺中市西屯區臺灣大道四段1176號
中正公園捐血室	09:00～17:00	04-2236-4473	臺中市北區學士路91號正對面 (中國醫藥大學附設醫院復健大樓 正對面)
三民捐血室	08:00～17:00	04-2227-0393	臺中市西區三民路一段174號7樓
大里捐血室	09:30～18:00	04-2483-0365	臺中市大里區東榮路一段128號
定 點 車			
臺中公園捐血車	09:00～17:00 (週一不作業)	04-2223-1085	臺中市北區精武路291-3號對面 (中興堂對面停車場內)
新光三越捐血車	10:00～18:00	04-2251-5683	臺中市新光三越百貨後方惠安停車場內(臺中市西屯區市政北七路、 惠來路二段路口)



## 台南捐血中心 業務轄區：臺南市、嘉義縣、嘉義市、雲林縣

地 點	服務時間	電 話	地 址
台南捐血中心	08:00～17:00	06-213-1212	臺南市中西區永福路一段85號
<b>捐 血 站</b>			
雲林捐血站	08:00～18:00	05-532-0866	雲林縣斗六市莊敬路300號 (成大醫院雲林分院斜對面)
嘉義捐血站	08:00～18:00	05-233-5952	嘉義市博愛路一段488號 (近北興陸橋、自由路)
<b>捐 血 室</b>			
愛心樓捐血室	08:00～18:30	06-213-1212 分機100	臺南市中西區永福路一段85號
虎尾捐血室	08:00～17:00 (春節、清明節、端午節、中秋節 不作業)	05-636-1161	雲林縣虎尾鎮光復路446號2樓
新營捐血室	08:00～17:00 (春節、清明節、端午節、中秋節 不作業)	06-632-8473	臺南市新營區信義街73號 (衛生福利部新營醫院東側門)
永康捐血室	08:00～17:00 (春節、清明節、端午節、中秋節 不作業)	06-312-1255	臺南市永康區復興路427號 (高雄榮民總醫院臺南分院八樓)
<b>定 點 車</b>			
嘉義公園捐血點	09:00～17:00 (週一、春節、清明節、端午節、 中秋節不作業)	05-271-1218	嘉義市中山路底與啟明路交叉路口 (家庭教育館斜對面體育場停車場 內)
中山捐血車	10:00～18:00 (春節、清明節、端午節、中秋節 不作業)	06-229-5706	臺南市北區公園路上台南公園旁 (兵配廠對面)
成大捐血車	11:00～18:00 (週日、春節、清明節、端午節、 中秋節不作業)	06-208-2670	臺南市東區勝利路上與大學路 交叉口
特力屋捐血點	平日 13:30～18:30 週六、日 10:30～18:30 (週三、春節、清明節、端午節、 中秋節不作業)	06-358-0888	臺南市北區文賢路720號

## 高雄捐血中心 業務轄區：高雄市、屏東縣、澎湖縣

地 點	服務時間	電 話	地 址
高雄捐血中心	08:00～17:00	07-366-0999	高雄市楠梓區高楠公路1837號
捐 血 站			
屏東捐血站	08:00～17:00	08-752-1917	屏東市和平路71號
馬公捐血站	08:00～18:00 (週二、三、四不作業)	06-926-2606	馬公市中山路62號
捐 血 室			
楠梓捐血室	08:00～17:00	07-364-1832	高雄市楠梓區高楠公路1837號
前金捐血室	09:00～17:30	07-282-7465	高雄市前金區中華三路7號6樓
岡山捐血室	09:00～17:00	07-621-6524	高雄市岡山區壽華路58號
捷運前鎮捐血室	09:30～17:30 (週一、五不作業)	07-813-7149	高雄市前鎮區翠亨北路225號 (捷運前鎮高中站B1，1號出口)
左營捐血室	09:30～18:00	07-348-7155	高雄市左營區博愛三路635號
捷運鳳山捐血室	09:30～17:30	07-745-9181	高雄市鳳山區光遠路226號 (捷運大東站B1，1號出口)
捷運三民捐血室	09:30～18:00	07-313-7631	高雄市三民區博愛一路220號地下 一層(捷運後驛站地下一層2號出 口處)
定 點 車			
鳳山金聲號捐血車	09:00～18:00 (週一、三不作業)	07-747-3421	高雄市鳳山區立志街 (鳳凌廣場前)
文化號捐血車	10:00～18:00 (週一、二、四不作業)	07-223-4708	高雄市苓雅區和平一路 (高師大斜對面)

## 花蓮捐血中心 業務轄區：花蓮縣、宜蘭縣、台東縣

地 點	服務時間	電 話	地 址
花蓮捐血中心	08:00～17:00	03-856-0990	花蓮市中山路一段170號
捐 血 站			
宜蘭捐血站	08:00～17:00	03-932-5544	宜蘭市擺厘路16-7號
台東捐血站	08:00～17:00	089-221-995	臺東市四維路三段198號
捐 血 室			
中心捐血室	08:00～17:00	03-856-0990 分機123	花蓮市中山路一段170號
定 點 車			
萬連號羅東定點車	10:00～16:00 (週二、四、六、春節期間 不作業)	03-957-6206	宜蘭縣羅東鎮中興路3號 (羅東鎮公所前停車場內)

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## Head Office

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### Taiwan Blood Services Foundation

3 FL. No. 3, Nan-Hai Road, Taipei 10066, Taiwan, R.O.C.

TEL: 886-2-2351-1600      FAX: 886-2-2395-1002

Website: [www.blood.org.tw](http://www.blood.org.tw)

[www.i-blood.org.tw](http://www.i-blood.org.tw)

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## Regional Office

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### Taipei Blood Center

No. 123, Lih-Der Road, Taipei 112, Taiwan, R.O.C.

TEL: 886-2-2897-1600

FAX: 886-2-2897-1601

**Executive Region:** Taipei City, New Taipei City,  
Keelung City, Kinmen County, Matsu County

### Tainan Blood Center

No. 85, Sec. 1, Yongfu Road, West Central Dist., Tainan  
City 700, Taiwan, R.O.C.

TEL: 886-6-213-1212

FAX: 886-6-213-3201

**Executive Region:** Tainan City, Chiayi City,  
Chiayi County, Yuenlin County

### Hsinchu Blood Center

No. 8, Lane 215, Guangming 11th Road, Jhubie City,  
Hsinchu County 302, Taiwan, R.O.C.

TEL: 886-3-555-6111

FAX: 886-3-555-0305

**Executive Region:** Taoyuan County, Hsinchu County,  
Miaoli County

### Kaohsiung Blood Center

No. 1837, Gaonan Highway, Nanzi Dist., Kaohsiung  
City 811, Taiwan, R.O.C.

TEL: 886-7-366-0999

FAX: 886-7-364-1556

**Executive Region:** Kaohsiung City, Pingtung County,  
Penghus County

### Taichung Blood Center

No. 1176, Sec. 4, Taiwan Boulevard, Xitun Dist.,  
Taichung City 407, Taiwan, R.O.C.

TEL: 886-4-2461-2345

FAX: 886-4-2461-3939

**Executive Region:** Taichung City, Changhwa County,  
Nantou County

### Hualien Blood Center

No. 170, Sec. 1 Jhongshan Road, Hualien 970, Taiwan,  
R.O.C.

TEL: 886-3-856-0990

FAX: 886-3-857-5190

**Executive Region:** Hualien County, Yilin County,  
Taitung County

# 捐血者健康標準

## Criteria for Donor Selection

中華民國95年3月15日衛署醫字第0950207650號令發布

### 第一條 本標準依血液製劑條例第十四條第二項規定訂定之。

### 第二條 捐血者須符合下列條件，始得捐血：

#### 一、年齡：

- (一) 17歲以上，65歲以下，一般健康情況良好。
- (二) 未滿17歲者，應視體能狀況，並經法定代理人之同意，始得捐血。
- (三) 逾65歲者，除應健康情況良好外，並應取得醫師之同意，始得捐血。

#### 二、體重：

- (一) 女性應45公斤以上，男性應50公斤以上。
- (二) 捐分離術血小板、分離術白血球及分離術血漿者，應50公斤以上。

#### 三、體溫：口溫不超過攝氏37.5度。

#### 四、血壓：收縮壓90～160毫米汞柱，舒張壓50～95毫米汞柱，如兩者之距離低於30或高於90毫米汞柱，須經醫師許可。

#### 五、血液檢查：

- (一) 血紅素：男性13公克%以上（使用硫酸銅法時血液比重1.054）。女性12公克%以上（使用硫酸銅法時血液比重1.052）。
- (二) 血小板：捐血小板者，其血小板數目應在 $15 \times 10,000/\text{mm}^3$ 以上。
- (三) 白血球：捐白血球者，其絕對顆粒球數目應在 $3,000/\text{mm}^3$ 以上。

- (四) 血漿總蛋白：捐血漿者，應於首次捐血暨每隔半年加驗血漿總蛋白量，其血漿總蛋白應在6g/dl以上。

### 第三條 捐血者每次之捐血量及捐血間隔如下：

- 一、每次捐血以250毫升為原則，但體重60公斤以上者，每次捐血得為500毫升。
- 二、每次捐血250毫升者，其捐血間隔應為2個月以上；每次捐血500毫升者，其捐血間隔應為3個月以上。但男性年捐血量應在1,500毫升以內；女性年捐血量應在1,000毫升以內。
- 三、捐分離術血小板、分離術白血球或分離術血漿者，每次之間隔為2星期以上。
- 四、捐分離術血漿量每次以500毫升為限，其全年捐血漿量不得超過12公升。

### 第四條 捐血者有下列情形之一者，應暫緩捐血：

- 一、婦女懷孕中或產後（含流產後）6個月以內者。
- 二、大手術未滿1年或1年內曾接受輸血者。
- 三、4星期內曾接種麻疹、德國麻疹、腮腺炎及小兒麻痺（口服）等活性減毒疫苗者。
- 四、6個月內曾罹患肝炎或密切接觸肝炎病患者。
- 五、現患梅毒、活動性結核病、糖尿病、心臟病、消化道潰瘍出血、高血壓、腎臟病、哮喘、感冒、急性感染、傳染病、過敏病症者。



- 六、自瘧疾疫區回國1年內或曾在3年內罹患瘧疾者。
- 七、曾在72小時內拔牙者。
- 八、曾在5天內服用含Aspirin類藥物或其他可抑制血小板功能之藥物者，不得捐血小板。
- 九、B型肝炎表面抗原檢查呈陽性反應者。
- 十、C型肝炎病毒抗體檢查呈陽性反應者。
- 十一、民國69年至85年間曾在英國輸血或曾至英國旅遊或居留時間合計超過3個月者，或民國69年以後曾於歐洲旅遊或居留時間合計超過五年者。
- 十二、經通報為嚴重急性呼吸道症候群疑似或可能病例，於治療痊癒後，未逾3個月內者。
- 十三、曾與嚴重急性呼吸道症候群疑似或可能病例密切接觸，於最後接觸日起1個月內者。
- 十四、自有地區性傳播嚴重急性呼吸道症候群之地區回國後1個月內者。
- 十五、自西尼羅病毒流行區離境日起1個月內者。
- 十六、懷疑自己感染愛滋病毒者或2年內曾與可能感染愛滋病毒者發生性行為者。
- 十七、1年內曾從事危險性行為或曾罹患性病（梅毒、淋病、披衣菌、生殖器皰疹、軟性下疳、尖型濕疣等）者。
- 十八、1年內曾刺青者。

### 第五條 捐血者有下列情形之一者，永不得捐血：

- 一、曾患惡性腫瘤、白血病或其他經醫師認為永久不得捐血者。
- 二、曾有出血不止、抽癱或昏迷之病史者。
- 三、曾有吸毒或慢性酒精中毒者。
- 四、靜脈注射藥物成癮者、男性間性行為者及長期使用血液製劑者。
- 五、曾為AIDS患者。
- 六、愛滋病毒第一型及第二型（HIV-I / HIV-II）抗體檢查經確認呈陽性反應者。
- 七、人類嗜T淋巴球病毒第一型（HTLV-I）抗體檢查經確認呈陽性反應者。
- 八、曾罹患庫賈氏病者（CJD）、曾注射人類腦下垂體生長荷爾蒙者、曾注射人類腦下垂體親生殖腺素（human pituitary gonadotropins）者、曾注射牛胰島素等生物製劑者、曾接受硬腦膜移植者或家族中有庫賈氏病（CJD）患者。
- 九、曾從事性工作者。

### 第六條 捐血機構對捐血者實施健康篩檢之項目如附表。

### 第七條 本標準自發布日施行。

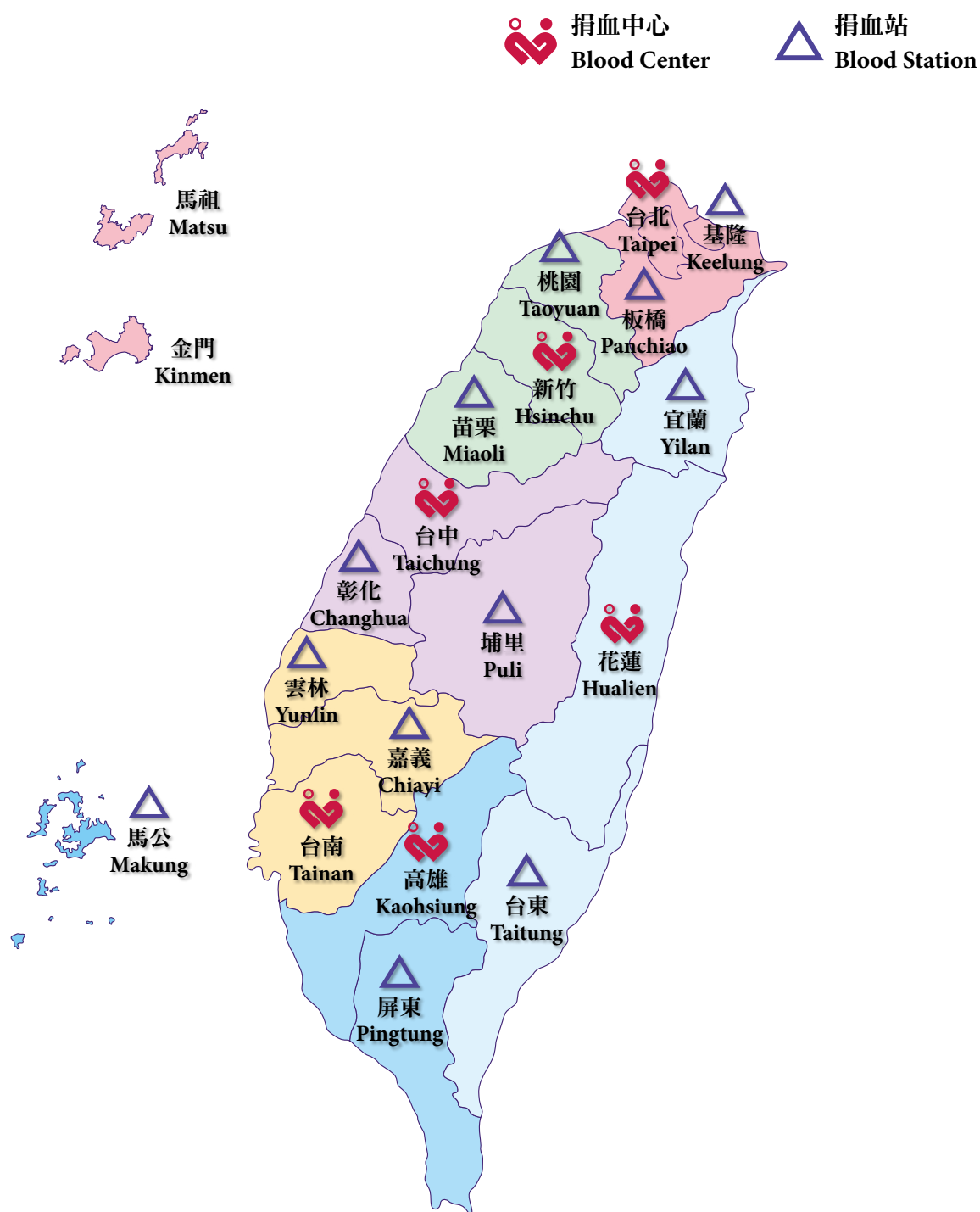
## 附表： 捐血者健康篩檢項目

## Screening Items for Blood Donors

- 一、體重：女性應45公斤以上，男性應50公斤以上。
- 二、體溫：口溫不超過攝氏37.5度。
- 三、血壓：收縮壓90～160毫米汞柱，舒張壓50～95毫米汞柱，如兩者之距離低於30或高於90毫米汞柱，須經醫師許可。
- 四、血液檢查
  - (一) 血紅素：男性13公克%以上（使用硫酸銅法時血液比重1.054）。女性12公克%以上（使用硫酸銅法時血液比重1.052）。
  - (二) 血小板：捐血小板者，其血小板數目應在 $15 \times 10,000/\text{mm}^3$ 以上。
  - (三) 白血球：捐白血球者，其絕對顆粒球數目應在 $3,000/\text{mm}^3$ 以上。
  - (四) 血漿總蛋白：捐血漿者，應於首次捐血暨每隔半年加驗血漿總蛋白量，其血漿總蛋白應在6g/dl以上。
- 五、ABO血型檢驗。
- 六、Rh血型檢驗。
- 七、紅血球異體抗體篩檢。
- 八、血清轉胺酶檢驗（ALT）。
- 九、梅毒血清檢驗（STS）。
- 十、B型肝炎病毒表面抗原檢驗（HBsAg）。
- 十一、人類免疫缺乏病毒第一型、第二型抗體檢驗（Anti-HIV-1/2）。
- 十二、C型肝炎病毒抗體檢驗（Anti-HCV）。
- 十三、人類嗜T淋巴球病毒第一型、第二型抗體檢驗（Anti-HTLV-I/II）。

# 捐血機構分佈

## Distribution of Blood Collection Facilities





# 論文摘要

## Research Abstracts

# Detection and Identification of Occult HBV in Blood Donors in Taiwan Using a Commercial, Multiplex, Multi-dye Nucleic Acid Amplification Technology Screening Test

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**Background:** The ability of a new generation commercial, multiplex, multi-dye test from Roche, the cobas TaqScreen MPX test, version 2.0, to detect and identify occult HBV infections was evaluated using routine donor samples from Kaohsiung Blood Bank, Taiwan.

**Study Design and Methods:** A total of 5973 samples were tested by nucleic acid amplification technology (NAT); 5898 in pools of six, 66 in pools of less than six and nine samples individually. NAT-reactive samples were retested with alternative NAT tests, and follow-up samples from the donors were tested individually by NAT and for all the HBV serological markers.

**Results:** Eight NAT-only-reactive donors were identified, and follow-up samples were obtained from

six of the donors. The results indicated that all eight donors had an occult HBV infection with viral loads <12 IU/ml.

**Conclusion:** The cobas\_ TaqScreen MPX test, version 2.0, has an advantage over the current Roche blood screening test, the cobas TaqScreen MPX test, for screening donations in countries with a high prevalence of occult HBV infections since the uncertainty associated with identifying samples with very low viremia is removed by the ability of the test to identify the viral target in samples that are reactive with the cobas TaqScreen MPX test, version 2.0.

**Key words:** blood screening, multi-dye, NAT test, occult HBV.

Vox Sanguinis 2014; 106: 103–110



# Risk of Transfusion-Transmitted Viral Infections: Contribution of Hepatitis B Vaccination of Newborns in an Endemic Country

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**Background/Case Studies:** With the implementation of strict donor selection and sensitive laboratory screening procedures such as nucleic acid testing (NAT), the risks of transfusion-transmitted viral infections are low at present. In this study, we analyzed the residual risks of HIV-, HCV-, and HBV-infectious donations, highlighting the contribution of a nationwide hepatitis B vaccination program that has been in place since 1985.

**Study Design/Methods:** Data for the 2 million donations between February 2013 and March 2014 were collected. Of these donations, 92% were provided by repeat-tested (RT) donors and were analyzed for determination of risk by using the window-period model. The window periods used throughout the analysis were 9.1 d for HIV-1, 7.4 d for HCV, and 30 d for HBV. The RT donors with a confirmed-seropositive result and those with a NAT-positive result were considered as infected and were used for determination of risk, that is, the risk caused by their prior donations. The risk of HBV was determined as that of confirmed infections multiplied by the adjustment factor 2.38 (Korelitz et al, Transfusion 1997), in considering the

risk introduced through the prior donations from donors recovered from their infection as well as from donors positive at the time of donation.

**Results/Findings:** Our analyses show that the residual risks per 1 million donations are 0.95 for HIV, 3.5 for HCV, and 35 for HBV. The risk of HBV-infectious donations from donors born after 1985 is significantly lower than from those born before 1985 (4.9 per million vs. 53 per million,  $p < 0.0001$ ).

**Conclusion:** The residual risks of blood-transmissible infections by RT donors in a hepatitis B-endemic country were determined by using the incidence-window period model. The risks of transfusion-transmitted viral infections are low, except for HBV infection. We report here a nationwide program, newborn hepatitis B vaccination that significantly decreases the incidence of infection in donors and thus decreases the risk of transfusion-transmitted HBV infections.

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# Predicting Future First and Reactivated Blood Donor Returns by Ferritin and Hemoglobin Analysis

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**Background:** Adequate blood supply has been one of the goals of blood donation centers. A previously published meta-analysis of 47 studies revealed that the main reasons for not returning blood donations were temporary deferrals and adverse donation events from behavior and intentions point of view<sup>1</sup>. The purpose of this study was to explore the role of ferritin and hemoglobin data in predicting future blood donor returns.

**Methods:** From June 2011 to April 2012, 451 first and reactivated donors (who have not donated in the past 3 years), joined the study for ferritin and hemoglobin evaluation. All donated successfully by copper sulfate (CuSO<sub>4</sub>) screening for standardized hemoglobin (Hb) 12g/dL (female) and 13 g/dL (male). Hemoglobin was tested again after donation by Sysmex-XT1800i. Follow up of at least one year for each donor was scheduled through June 2013.

Among these 451 donors, 247 were male and 204 were female. Plasma ferritin level was measured and iron deficiency (ID) was defined as a ferritin level equal

to, or less than, 20ng/mL. Ferritin and Hb were tested again at each subsequent donation. Female donors could donate 250 cc and return in 2 months, or 500 cc and return in 3 months (eighteen donation numbers totally of 500 cc donation). The yearly total permitted donation was 1000 cc.

**Results:** The ferritin/Hb levels were  $244 \pm 175$  ng/mL/ $15.06 \pm 1.10$  g/dL in 247 male and  $70.9 \pm 62$  ng/mL/ $13.08 \pm 0.98$  g/dL in 204 female donors. One of the male donors (1/247; 0.4%) and 40 of the female donors (40/204; 19.6%) had ferritin equal to or, less than 20 ng/mL (ID). Comparison of ferritin and Hemoglobin Level in general population and first (and reactivated) female blood donors are in table 1 and table 2. A group (Group 1, N=15) passed copper sulfate tests but failed the more accurate Sysmex -XT1800i. An analysis of female donor successful return donation numbers is given in the Table 3.

The average successful return donation numbers were lower in subgroup 2 and 4, and lowest in subgroup 1. Subgroup 3 had the best average successful return donation numbers.

**Table 1.** Comparison of ferritin Level (mean, ng/ml) in general population and first (and reactivated) female blood donors.

Age		General population <sup>2</sup>	First (and reactivated) blood donors
premenopause	19-29	54 (n=59)	71.5 (n=51)
	30-50	72 (n=169)	56.4 (n=125)
menopause	51-64	191 (n=145)	125.4 (n=28)

**Table 2.** Comparison of Hb Level (mean, g/dl) in general population and first (and reactivated) female blood donors.

Age		General population <sup>2</sup>	First (and reactivated) blood donors
premenopause	19-29	12.6±1.3 (n=59)	13.15±1.2 (n=51)
	30-50	12.6±1.5 (n=169)	13.0±0.9 (n=125)
menopause	51-64	13.0±1.1 (n=145)	13.4±0.8 (n=28)

**Table3.** Analysis of return donation numbers according to Hb and ferritin levels of female donors.

Group	1	2	3	4	5
Donors(No.)	15	82	107	40	164
Hb (g/dL)	<12	12-12.9	≥13	-	-
Ferritin (ng/mL)	-	-	-	≤20	>20
Successful return donation no. / Donors no.	4/15	51/82	107/107	26/40	132/164
Average successful return donation no.	0.26	0.62	1.00	0.65	0.80
P value (Chi-square test)	0.0341(2&3)* 0.0155(1&3)*			0.4936	

\* $p < 0.05$

**Discussion:** In many review papers, the main reason of deferral of female donor is low hemoglobin.<sup>3</sup> Our study also confirms the results of previous reports. However, in a prospect study in pre-menopausal female donors, neither hemoglobin nor ferritin level at baseline predicted the returned and those not returned.<sup>4</sup>

**Conclusions:** Female donor returns could best be predicted by hemoglobin level. Iron supplements

or prolongation of donation interval may be offered to female donors with below mean hemoglobin level.

Transfusion 2014; 54 (Supl. S2): 115A

# Proposed Ferritin-Hemoglobin Index for Determining the Maximum Annual Donations for Pre-menopause Plateletpheresis Donors

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**Background:** AABB Standard requires no more than 24 plateletpheresis donations per year. In 2010, the National Blood Service of UK recommended plateletpheresis donors should not donate more than 15 times per year.<sup>1</sup> In Taipei blood center, almost one quarter (1200/ 5233 donors) of plateletpheresis donors had donated 10 to 12 times in the last 6 months. For their safety, the iron loss in pre-menopause donors should be monitored. The purpose of this study is to focus on pre-menopause donors and determine the safe number of plateletpheresis times per year. The latest ferritin and hemoglobin (Hb) data, was investigated, and an index compiled. Recommendations are offered based on our proposed Ferritin-Hemoglobin Index.

**Methods:** The proposed Ferritin-Hemoglobin Index is defined as follows:

Ferritin-Hemoglobin Index =

$$\frac{\text{Pre-menopause donors HB.}}{\text{Menopause donors HB.}} \times \frac{\text{Pre-menopause donors Ferritin}}{\text{Menopause donors Ferritin}}$$

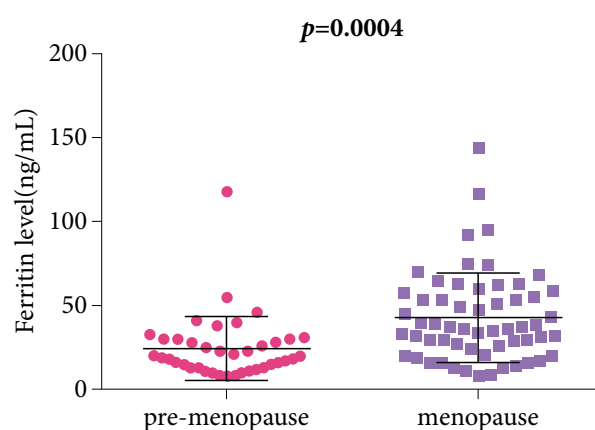
The ferritin and hemoglobin levels of menopause donors are used as the baseline in this study. From 2013 Sept. to 2014 March, 1170 frequent plateletpheresis

donors, including 1073 male and 97 female, donated 10-12 times, with ferritin and hemoglobin data documented. The latest available plasma ferritin and hemoglobin data were analyzed. Among these 97 female donors, 39 were pre-menopause, and 58 were menopause donors. The two groups were compared. Iron deficiency was defined as a ferritin level equal to or below 20ng/mL.

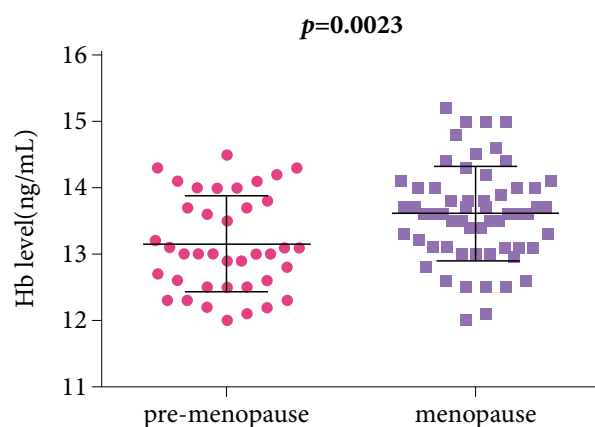
**Results:** Twenty-one out of 39 (53.8 %) pre-menopause donors and 13 out of 58 (22.4%) menopause donors were considered to have iron deficiency. The ferritin levels of these 39 pre-menopause and 58 menopause donors were  $24.54 \pm 19.04$  ng/mL and  $42.86 \pm 26.69$  ng/mL, respectively ( $p=0.0004$ ) (Fig. 1), while the Hb levels were  $13.15 \pm 0.72$  g/dL and  $13.61 \pm 0.71$  g/dL, respectively ( $p=0.0023$ ) (Fig. 2). Ten of these 39 pre-menopause and 1 of 58 menopause donors had Hb levels below the required 12g/dL for blood donation, ranging from 10.4 to 11.9 g/dL, and had been temporarily deferred 1 to 7 times. These mild anemias were recovered via high iron diets. Based on the calculated Hb and ferritin data above, the proposed Ferritin-Hemoglobin Index was defined as 0.55 (Fig.

3). Based on the AABB Standard, 24 times per year, this investigation finds that the optimal plateletpheresis is 13.2 (24 x 0.55) times per year for pre-menopause donors in general. Thus, the calculated blood loss from the pheresis procedure of pre-menopause donors will not exceed 1000cc per year.

**Figure 1.** Distribution of Ferritin Levels among Female plateletpheresis Donors.



**Figure 2.** Distribution of Hemoglobin Levels among Female plateletpheresis Donors.



**Figure 3.** Calculation of the Proposed Ferritin-Hemoglobin Index.

$$\frac{13.15}{13.61} \times \frac{24.54}{42.86} = 0.55$$

Hb (gm/dl)      Ferritin (ng/ml)      Index

**Discussion:** The pre-menopause female plateletpheresis donors loss about 40-50cc blood (corrected to Hb level 12gm/dl) upon each pheresis, in addition to menstrual loss 40-50cc each month. If this group donor only allowed to donate maximal 12~13 times / year, the total blood loss per year should be the same as menopause donors. So, ferritin and Hb levels will be the same in both premenopause and menopause donors.

**Conclusions:** Our proposed Ferritin-Hemoglobin Index is feasible, useful and reasonable for addressing the needs of pre-menopause plateletpheresis donors. In this manner, iron deficiency after plateletpheresis can be reduced.

Transfusion 2014; 54 (Suppl. S2): 120A

# Donor's Return Behavior Associated with Donor's Characteristics and Previous Donations

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**Background:** It is important to understand donor return behavior. Recruiting sufficient numbers of blood donors return for regular donations are essential for maintaining an adequate blood supply.

**Methods:** All whole blood donors from first-time and repeat donors who donated between Jan.1 and Mar 31, 2011, then studied their return behavior for one year follow-up. The 198,299 donations were made by 93,163 whole blood donors who were analyzed demographic characteristics and characteristics associated with donor return. Data were calculated ORs and 95-percent CIs by logistic regression.

**Results:** Fifty-eight percent of repeat donations were from males. Donations given by young donors, that is, aged 30 years and younger, accounted for 76.5% of the total first-time donations. In contrast, the same age group contributed only 36.6% to repeat donations. Donations by unmarried donors accounted for 78% of first-time donations, but only 43% of repeat donations. An analysis of the donations by the occupation of the donors found the proportion of first-time donations from students to be higher than that of repeat donations (42.7% vs.16.9%, respectively). Repeat donors tended to weight more than first-time donors.

A larger proportion (65%) of repeat donations were from donors weighing 61 kg and more. Larger volume (500ml) donations constituted 39.1% of the repeat donations but just 9.1% of the first-time donations. Small volume (250ml) donations were 90.9% of the first-time donations. After controlling for demographic and other characteristics, some demographic characteristics were also associated with retuning blood donors. Being male, blood collection mobile and smaller volume (250 ml) were less likely to return. Donor returning frequency decreased as weight increase. The number of previous donations was the strongest predictors for making subsequent donations. Donors with one to five, six to seventeen, and more than seventeen previous donations were 2.18, 4.51, and 11.33 times more likely to return than first-time donors.

**Conclusion:** Most of Taiwan's blood supply is from repeat donors. After adjusting for demographic and other donation variables, the number of previous donations is positively associated with future return, and there is a dose-response. To develop the strategies aimed at encouraging current donors to become repeat donors are needed.

Transfusion 2014; 54 (Supl. S2): 117A



## Follow-up of Hepatitis B Surface Antigen (HBsAg) Positive Donors WHO Developed with Undetectable HBsAg

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**Background:** From 1974 to 2012, blood donors in Taiwan are screened for HBsAg by immunoassay. Blood donors with HBsAg positive were followed and tested for HBsAg and anti-HBs after 6 months, but not tested for HBV DNA. The ratio of HBsAg negative/HBV DNA reactive among follow-up donors is not well understood.

**Aims:** The objective of this study was to determine the ratio of HBsAg negative/HBV DNA reactive among follow-up donors and evaluate the HBV follow-up algorithm.

**Methods:** In this study, all blood samples were collected from follow-up HBsAg negative donors. They were tested for HBsAg, Anti-HBs, Anti-HBc and HBV DNA by DiaSorin Murex assay on TECAN RMP 150 platform, Abbott AxSYM AUSAB reagent on AxSYM system, Roche Elecsys immunoassay on Elecsys System and Norvartis Ultrio plus assay on TIGRIS System. These donors were followed twice a year.

**Results:** We collected 157 follow-up donors samples from January 2011 to August 2011. Among these donors 119 (75.8%) were anti-HBc positive, and 38 (24.2%) were anti-HBc negative. Of all the 119 anti-

HBc positive cases, HBV DNA was reactive in 15 (9.6%) cases. HBV DNA was non-reactive in all 38 anti-HBc negative cases. In this study, there were 119 anti-HBc positive with HBV DNA reactive or HBV DNA non-reactive donors among follow-up HBsAg negative donors. The results predicted that those donors are low virus load chronic infection or occult HBV infection donors.

**Conclusions:** The NAT assay can detect infectious samples that could be potentially missed by immunoassay and exclude the deferral of donation due to false-positives of EIA reagent. Taiwan Blood Service Foundation has comprehensively adopted NAT testing since February 1, 2013 and revise HBV follow-up algorithm. This study demonstrates that new algorithm is able to improve the HBV follow-up procedure and consequently enhance blood safety and blood quality.

Vox Sanguinis 2014; 107 (Suppl. 1): 150

# Changing Age Distribution of Blood Donor Population from 1999 to 2012 in Taiwan

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**Background:** The aging index of Taiwan kept growing yearly, and that was 72.2% in 2011 and was the third among Asia countries. The composition and donation pattern may have changed over time because population aging.

**Aim:** The changing age distribution of blood donor population between 1999 and 2012 in Taiwan was analyzed. It could help us to realized how severe that the changing population demographics brought to blood supply side.

**Material & Method:** The data of whole blood donations and donors by sex, age, donation types for this report were extracted from Blood Management Information System of all six blood centers in Taiwan. Only whole blood donations and donors from 1999 and 2012 were included. The data of the population by age were referred to Statistical Yearbook of Interior on the web site of Ministry of the Interior.

**Results:** There were 2.3 million units of donations per year in 2010's and that was 27% more than 1999. (250 ml whole blood/unit) The proportion of donations

from repeat-donors was 73% in 1999, and increased to 91% in 2012. Donations from first-time donors showed great downward trend in 14 years. There were around 22 thousand units per year and that was 57.6% less by comparing 1999. From 1999 to 2012, the number of repeat donor went up totally, especially for donors of age beyond 51 years old who had 3 times more than those of 1999. Nevertheless, young donors of age 21-25 were diminished for 17%. The number of first-time donors declined yearly and donors of the age of 21-30, 31-40 and 41-50 decrease most for 65%-71%. The mean age of donors was 29.8 in 1999 and 34.4 in 2012. The donation rate was analyzed by adjusting for the change in population size. Donors of age of 17-25 kept their highest donation rate of more than 10% among 14 years, however, they showed downward trend by year. The donation rate of donors beyond 50 years old was growing from 1.7% in 1999 to 3.4% in 2012. The return rate of first-time by following 2 years after their first donations was also analyzed. For female donors, age of 17-20 had highest return rate of 61% and 21-25 had lowest return rate of 31%. For male donors, the highest return rate went to 17-20, 39%, and the lowest was 29% for donors of 21-25.

**Discussion:** The need of blood was increased gradually in 14 years, however, donations increased among repeat donors, especially those of age 50 years or older. Donors of elder will gradually move to the recipient side of blood, whereas younger donors are shrinking. The abatement of young donors was not only because of they are reduced in population size but also less and less of them donated blood. How to recruit young donors and keep them retaining in effective donor pool is the most severe challenge for blood services and is the most important issue in maintaining long term balance between provision and need of blood.

Vox Sanguinis 2014; 107 (Suppl. 1): 081

# Donor Deferral and Its Consequence on Donor Return in Taiwan

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**Background:** Numbers of donors were deferred temporarily from donor selection. This study analyzed the deferred donors during 2006 and their return over the following 3 years.

**Aim:** Some donors did not return to donate blood after being deferred. This study tried to assess the impact of donor deferral on donor availability by analyzing the return rate according to each reason for deferral.

**Methods:** The deferred donor data in 2006 was taken from Hsinchu blood center which is one of six blood centers in Taiwan and provided approximately 14% of the total number of blood donations. The data was derived from the Blood Collection and Supply Information System of Taiwan Blood Services Foundation. Their donation data was followed until end of 2009. The donors who did not return to donate blood during 2010, 2011 or 2012 were considered to be lost as blood donors.

**Results:** A total of 263,933 donors presented themselves for donation during 2006. Of these, 26,104

donors (9.89%) were deferred during the selection process, which included direct oral questioning and donor tests. Most donors were deferred with no defined deferral date for reasons such as low hemoglobin and abnormal blood pressure. Only 0.92% of deferred donors (2,434 donors) was deferred for a certain period or indefinitely and were recorded in the Information System, and controlled. For those 2,434 donors, the reasons for deferral were analyzed. The top three deferral reasons were: having travelled from malaria-endemic areas (49.3%), tattooing (6.2%) and having travelled from West Nile Virus-endemic areas (5.7%). Donors were allowed to donate blood after the deferral period. Among them, 54.9% returned to donate blood over the following 3 years. The return rate for males and females were 52.5% and 53.4% respectively. However, the return rate was lower in younger donors. The return rate was approximately 34.1% for donors under 20 years of age and 46.3% for donors between the ages of 20 and 25. Among younger donors, those were deferred because of tattooing in past one year had lowest return rate of 29.2%.

**Conclusions:** According to this study,

approximately 1% of prospective donors were deferred and the reason for deferral recorded. Half did not return to donate blood during the next 3 years. There were over 2 million donors present themselves at collection areas per year in Taiwan and it is estimated that ten thousand blood donors are lost a year. The major reason for donor deferral was donors traveling to malaria-endemic areas and it counted up to 16,848 donors in 2006. However, only 26 cases of malaria infection were reported to TCDC that year. The malaria-endemic regions defined by countries were not proper and caused donors with no risk were deferred also. To reduce donor losses, those regions should be more specified. For tattooed donor, the length of deferral should be reassessed since its current impact to blood safety may be not as serious as usual.

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## Analyze the platelet function between pre-storage leukocyte reduced and non-leukocyte reduced apheresis platelets

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**Background:** Platelet transfusions are effective for the prevention and treatment of bleeding in patients with disorders of platelet number and/or function. Apheresis platelets transfusion are currently widespread in Taiwan, thus, the platelet quality has increasingly become important.

**Aims:** This study compared the quality between pre-storage leukocyte reduced and non-leukocyte reduced apheresis platelets during the storage period.

**Methods:** Forty eligible subjects were randomly assigned in a 1:1 ratio to the groups of double-dose pre-storage leukocyte reduced apheresis platelets (Trima Accel collection system) or non-leukocyte reduced (MCS+ Haemonetics Corp.) by computer-generated random numbers using block randomization with block size of 2. Sampling was carried out at 0, 1, 3 and 5 days from these two products for testing aggregation to ADP and collagen, hypotonic shock response (HSR), extent of shape change (ESC), pH, pCO<sub>2</sub>, pO<sub>2</sub>, glucose and lactate. Continuous variables were reported as mean  $\pm$  standard deviation (SD) and categorical variables were reported as percentages.

Student t tests were used to compare the values of biomarkers between groups of Trima and Haemonetics. All reported p values were those of two-sided tests; statistical significance was set at  $p < 0.05$ . All analyses were performed using SAS version 9.3 (SAS Institute Inc, Cary, NC).

**Results:** In terms of platelet function variables, aggregation induced by ADP (300 $\mu$ M) and collagen (20 $\mu$ g/ml) during 5-day storage did not significantly differ between pre-storage leukocyte reduced and non-leukocyte reduced apheresis platelets ( $p > 0.05$ ). Values of several in vitro properties, these included ESC, pO<sub>2</sub> and lactate levels, also had the similar results. pH in both platelets products maintained at acceptable level ( $\geq 6.2$ ) up to 5 days. In contrast, values of HSR showed significantly higher in pre-storage leukocyte reduced apheresis platelets than non-leukocyte reduced at 0, 1 and 3 days ( $p < 0.05$ ).

**Conclusions:** This study indicated there is no quality impairment in pre-storage leukocyte reduced process, moreover, HSR showed higher level at 0, 1 and 3 days in clinical data. Leukocyte depletion of



blood components can avoid HLA immunization and transfusion reactions in multiple transfusion patients. It should be done if patients who have a clear indication for the transfusion of pre-storage leukocyte reduced apheresis platelets.

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## 醫療財團法人台灣血液基金會103年年報

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成為台灣安全醫療用血來源的領航者。