



ANNUAL DATA REPORT

Global Organ Donation 2024

A record year, with circulatory-death donation now contributing nearly three in ten deceased donors worldwide

ABSTRACT

The 2024 reporting cycle recorded 173,727 solid organ transplants across 92 Member States, a 1% increase on 2023 and the highest figure on record [1, 2]. Deceased donors reached 47,180, an increase of approximately 3%, driven entirely by growth in donation after circulatory death (DCD), which rose 17% to 13,366 donors. Donation after brain death (DBD) edged down 2% to 33,814 donors.

Spain set a national record at 53.9 donors per million population; the United States led globally by absolute volume. This article summarizes the year's activity and argues that the 2024 data reinforce a finding now visible across multiple reporting cycles: legal change without infrastructural reinforcement does not deliver outcomes. The English experience of soft opt-out, the Spanish coordinator model, and the persistent low-rate performance of Germany under opt-in are read together as evidence for that claim.

Introduction

The 2024 reporting cycle is the third consecutive year of global growth in transplant activity and the first in which donation after circulatory death (DCD) contributed nearly three in ten deceased donors worldwide [1, 2].

Data are drawn from the GODT 2024 global report [2], the EDQM Newsletter Transplant 2025 [3], NHSBT [4], ONT [5], OPTN/UNOS [6], and national bodies [7-10]. The composition of growth — DCD up 17%, DBD down 2% — extends a multi-year shift that is now structural rather than provisional.

This article summarizes the cycle, examines regional and national patterns, and argues that the data reinforce a finding now visible across multiple reporting cycles: legal change without infrastructural reinforcement does not deliver outcomes. Three threads carry the argument — the regional distribution of high-performance systems, the United Kingdom as a natural experiment in soft opt-out, and family-consent data as the proximate variable [14].

02 · GLOBAL ACTIVITY

Global activity and top performers

Total transplant activity rose to 173,727 in 2024, up from 172,397 in 2023 [2]. Activity was reported by 92 Member States, of which 91 performed transplants (Luxembourg reported only donation activity). Deceased donor numbers reached 47,180, an increase of approximately 3%, driven entirely by DCD growth.

Of the 13,366 DCD donors reported globally, controlled DCD (Maastricht type III) accounted for 94% (n = 12,485); Type II (uncontrolled) for 1%; Type IV (cardiac arrest after brain-death declaration) for 4%; and Type V (DCD following medical assistance in dying) for 1% [20].

Country	Rate (pmp)	DCD share
Spain	53.9	≈ 51%
United States	49.7	43%
Portugal	36.7	—
Czech Republic	34.3	—

Belgium	32.6	≈ 50%
Croatia	30.3	—
Lithuania	24.8	—
Canada	23.1	35.9%
Netherlands	21.1	66.2%
United Kingdom	20.4	≈ 52%
Australia	19.7	36.4%
Germany	11.4	≈ 0%

Table 1. Top-performing systems by deceased-donor rate 2024, with DCD share where reported. Sources: [3, 5, 6, 10].

Spain’s 53.9 pmp is the highest deceased-donor rate ever submitted to GODT, exceeding its 2023 figure of 49.4 [5]. The United States held second place by rate and led globally by absolute volume (16,989 donors) [6]. The Netherlands continued to operate the most DCD-led major program in the world: 247 of its 373 deceased donors (66.2%) were DCD [2]. Spain reported 1,316 DCD donors and remains the only national program transplanting all five solid organ types from DCD donors, including hearts [11].

03 · REGIONAL PATTERNS

Where the system held — and where it bent

3.1 Western Europe

Western Europe remained the most productive region for deceased donation. Spain set a national record at 53.9 pmp; DCD now accounts for roughly half of Spanish donors. Portugal held at 36.7 pmp. Belgium reported 32.6 pmp, with a DCD share approaching 50%.

The Netherlands reported 21.1 pmp at the world-leading 66.2% DCD share. The United Kingdom, at 20.4 pmp, diverged from the rest of the region. Germany remained the lowest-performing major Western European program at 11.4 pmp — a function of low registration rather than low family consent [13].

3.2 Northern Europe, Eastern Europe, and the Americas

Nordic systems remained stable, with low objection rates (typically under 6%) underpinning the soft-opt-out frameworks. Lithuania emerged as a standout performer at 24.8 pmp, attributed to strengthened hospital coordination and public awareness.

Eastern Europe's leaders — Croatia (30.3 pmp), Czech Republic (34.3 pmp), Belarus (near 25 pmp) — continued to perform under hard opt-out frameworks. Poland rose to 16.6 pmp; Bulgaria remained well below its nominal opt-out potential, reinforcing the finding that the legal default alone does not translate into higher donation rates [17].

In the Americas, the United States (49.7 pmp / 16,989 donors) remains globally dominant by volume; US DCD reached 7,283 donors in 2024 [6]. Canada reported 23.1 pmp. Latin America showed mixed performance — Argentina 17.5, Brazil 17.3 (functioning as opt-in despite the nominal opt-out law), Uruguay 19.7, Chile 10.8.

3.3 Asia-Pacific, Middle East, and Africa

Japan remained an outlier — DCD pathways predominate culturally even at low overall donation rates. South Korea reported 7.7 pmp following the formalization of controlled DCD in 2022. Australia reported 19.7 pmp at 36.4% DCD share (192 of 527 donors); New Zealand 13.2 pmp. Both Australia and New Zealand operate ONT-patterned coordinator models [10].

The Middle East continued to operate under Islamic scholarly endorsements of brain death. The UAE reported 11.6 pmp, Kuwait 11.2, Israel 10.4, Qatar 8.1; no country in the region had a functioning DCD program. Africa remained constrained by infrastructural and legislative barriers: South Africa 1.5 pmp, Tunisia 0.7 pmp; Nigeria and Kenya reported zero deceased donors [27].

04 · THE UK NATURAL EXPERIMENT

The United Kingdom — divergence in detail

The NHSBT Activity Report 2024/25, covering April 2024 through March 2025, recorded a 7% fall in deceased donors: DBD donors fell 12% to 676; DCD donors fell 2% to 727 [4]. Total transplants declined 2%. The transplant waiting

list reached 8,096 patients at 31 March 2025 — the highest figure on record and an 8% increase year-on-year.

Family consent (or authorization) held static at 59% overall — deemed-consent group at 48%, expressed-consent group at 87% [4]. The system also showed pockets of growth: living-donor kidney transplants rose 6% to 964, now 29% of the kidney program; lung transplants rose 8% to 151 (inclusive of the heart-lung block; NHSBT's lung-only subtotals sum to ~149), the highest UK total since 2019/20.

The UK divergence is not attributable to consent law. England's soft opt-out framework, in place since May 2020, has not produced sustained gains. Consent rates fell from a pre-2020 peak around 67% to 59–61% by 2023/24 and have not recovered [15]. The pattern is consistent with the wider literature on opt-out defaults [19] and with the conclusion that legislative reform delivers only when paired with investment in coordinator capacity, family-approach training, and intensive-care pathway design [14].

05 · FAMILY CONSENT

Family consent — the real variable

Across reporting countries, family-consent rate continues to track more closely with donation activity than the legal consent default. Spain reports approximately 85% (refusal \approx 15%); Belgium approximately 83%; Sweden approximately 78%; Germany approximately 75% — alongside donor-registry registration of only approximately 36%, where the gap is identification, not culture [5, 13]. The United Kingdom's 59% sits well below the European top tier.

High-refusal countries — Bangladesh, Oman, Kazakhstan, Türkiye, Tunisia, Switzerland, Malaysia — operate under widely different consent frameworks, suggesting that culture, trust, and approach quality dominate the legal-default question. In Spain, ICU-embedded coordinator models engage families earlier and produce a refusal rate roughly half that of the UK [14].

The Council of Europe regional total for waiting list and waiting-list deaths followed the same proportional pattern reported across recent cycles: kidney disease accounted for 85.5% of all waiting-list patients and 63% of all deaths on the waiting list [3].

06 · CONCLUSION

Conclusion

The 2024 cycle reaffirms Spain's continued leadership, a structural shift toward circulatory-death donation, and the now-familiar finding that legal change without infrastructural reinforcement does not deliver outcomes.

The strongest predictors of high national donation rates remain coordinator infrastructure and family-consent culture rather than the legal consent framework. Sustained gains in subsequent cycles will depend on continued investment in DCD pathway capacity, ICU coordinator training, and the closure of long-standing infrastructural gaps in low- and middle-income reporting countries [27, 28].

07 · REFERENCES

References

- [1] Domínguez-Gil B, Martín-Maldonado L, Coll E, et al. Organ donation and transplantation worldwide: GODT 2024 report. *Transplantation*. 2026;110(3):e657-e670.
- [2] Global Observatory on Donation and Transplantation (GODT). *Donation and Transplantation Global Report 2024*. December 2025.
- [3] Council of Europe / EDQM. *Newsletter Transplant: International Figures on Donation and Transplantation 2025 (covers 2024 data)*. Strasbourg, 2025.
- [4] NHS Blood and Transplant. *Organ and Tissue Donation and Transplantation Activity Report 2024/25*.
- [5] Organización Nacional de Trasplantes (ONT). *Memoria de Actividad 2024*.
- [6] OPTN / UNOS. *National transplant data dashboards 2024*.
- [7] Donate Life America. *Organ, Eye and Tissue Donation Statistics 2024*.
- [8] Agence de la biomédecine. *Bilan d'activité 2024*.
- [9] Centro Nazionale Trapianti (CNT). *Analytical Report 2024 — The Activities of the National Transplant Network*. Italian Ministry of Health, October 2025.
- [10] DonateLife / Organ and Tissue Authority. *2024 Australian Donation and Transplantation Activity Report*.
- [11] Vidgren M, Delorme C, Oniscu GC. Challenges and opportunities in organ donation after circulatory death. *J Intern Med*. 2025;297(2):124-140.
- [12] Lomero M, Gardiner D, Coll E, et al. Donation after circulatory death today. *Transpl Int*. 2020;33(1):76-88.
- [13] Mihály S, Smudla A, Domínguez-Gil B, et al. Approaching the families of potential deceased organ donors. *Transpl Int*. 2023;36:11498.
- [14] Streit S, Johnston-Webber C, Mah J, et al. Ten lessons from the Spanish model. *Transpl Int*. 2023;36:11009.

- [15] Rees M, McLaughlin L, Paredes-Zapata D, et al. Comparing consent systems in Spain and England. *Front Public Health*. 2024.
- [16] Molina-Pérez A, et al. Differential impact of opt-in/opt-out policies. *BMJ Open*. 2022;12:e061064.
- [17] Etheredge HR. Assessing global organ donation policies: opt-in vs opt-out. *Risk Manag Healthc Policy*. 2021;14:1985-1998.
- [18] Tennankore KK, Klarenbach S, Goldberg A. Perspectives on opt-out vs opt-in legislation. *Can J Kidney Health Dis*. 2021;8.
- [19] Dallacker M, Appelius L, Brandmaier AM, Morais AS, Hertwig R. Opt-out defaults do not increase organ donation rates. *Public Health*. 2024;236:436-440.
- [20] Thuong M, et al. New classification of donation after circulatory death donors. *Transpl Int*. 2016;29(7):749-759.
- [21] Domínguez-Gil B, et al. Expanding controlled donation after the circulatory determination of death. *Intensive Care Med*. 2021;47(3):265-281.
- [22] Bollen J, et al. Organ donation after euthanasia: a Dutch practical manual. *Am J Transplant*. 2016.
- [23] Greer DM, et al. Determination of brain death/death by neurologic criteria: the World Brain Death Project. *JAMA*. 2020;324(11):1078-1097.
- [24] Schroder JN, Patel CB, DeVore AD, et al. Transplantation outcomes with donor hearts after circulatory death. *N Engl J Med*. 2023;388(23):2121-2131.
- [25] Council of Europe / EDQM. Guide to the Quality and Safety of Organs for Transplantation, 9th edition.
- [26] The Declaration of Istanbul on Organ Trafficking and Transplant Tourism, 2018 edition.
- [27] Okereke IC, et al. Organ transplantation in Africa. *Transplant Rep*. 2025.
- [28] Loua A, Feroletto M, Sougou A, Kasilo OMJ, Nikiema JB, Fuller W, Kniazkov S, Tumusiime P. A review of policies and programmes for human organ and tissue donations and transplantations, WHO African Region. *Bull World Health Organ*. 2020;98(6):420-425.

DISCLOSURE

This synthesis was prepared with the assistance of generative artificial intelligence. Source materials were limited to open-access peer-reviewed publications, government and registry websites, and other publicly available databases. Every reference cited in this article was independently reviewed, verified against its primary source where available, and curated by the WOD Collaborative. The AI tool was used for drafting, restructuring, and consistency checking; all factual claims, attributions, and editorial decisions remain the responsibility of the WOD

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