

3. National Blood Transfusion Bill, 2025- Science & Technology

Patients' welcome introduction of the National Blood Transfusion Bill, 2025. The National Blood Transfusion Bill, 2025, aims to replace India's fragmented guideline-based system with a statutory National Blood Transfusion Authority to ensure uniform safety standards and mandatory registration. This move seeks to secure a safe blood supply for dependent groups like Thalassaemia patients by enforcing legal accountability and promoting voluntary donation.

National Blood Transfusion Bill, 2025

Introduction- The National Blood Transfusion Bill, 2025 was recently introduced in Parliament, marking a significant legislative step towards regulating India's blood transfusion ecosystem. The Bill has been widely welcomed by patient advocacy groups, particularly those representing Thalassaemia patients, as it aims to transition the sector from a fragmented guideline-based system to a unified, statutory framework.

Understanding Blood Transfusion

Definition- A medical procedure involving the intravenous transfer of whole blood or specific blood components (Red Blood Cells, Plasma, Platelets, Clotting Factors) from a donor to a recipient.

Safety Protocols- The process involves rigorous steps to ensure-
Quality of blood products. Compatibility between donor and recipient. Recipient safety (screening for infections).

Rationale- the Bill Needed

The current ecosystem suffers from systemic inefficiencies that necessitate legal intervention-

Fragmented System- Services are currently operated by a mix of public and private blood banks under **non-uniform guidelines**, leading to inconsistencies in quality.

Weak Legal Mandate- The regulatory bodies—Directorate General of Health Services (DGHS) and State Blood Transfusion Councils—rely primarily on executive guidelines and policies rather than binding statutory laws.

Uneven Performance- There is a significant disparity in implementation; while some states have robust tracking systems, others struggle with shortages, expired stocks, and weak monitoring mechanisms.

High Human Cost- The lack of strict regulation disproportionately affects vulnerable groups like Thalassaemia patients and emergency victims, who face risks of avoidable shortages and transfusion-transmitted infections due to poor screening.

Key Provisions of the Bill

Institutional Framework

National Blood Transfusion Authority (NBTA)- Establishment of a central statutory body to provide governance, technical oversight, and reduce state-to-state variations in service quality.

Standardization and Regulation

Uniform Standards- Mandates uniform national standards for the entire blood supply chain- Collection
\$ \rightarrow\$ Testing \$ \rightarrow\$ Processing \$ \rightarrow\$ Storage \$ \rightarrow\$ Distribution
\$ \rightarrow\$ Transfusion.

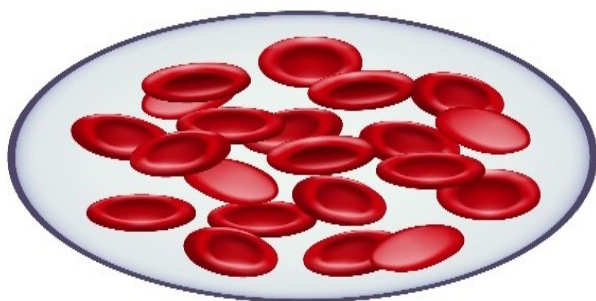
Compulsory Registration- All blood centers must undergo mandatory registration. This is aimed at eliminating Unregulated operators. Illegal/unsafe collection points.

Supply and Ethics

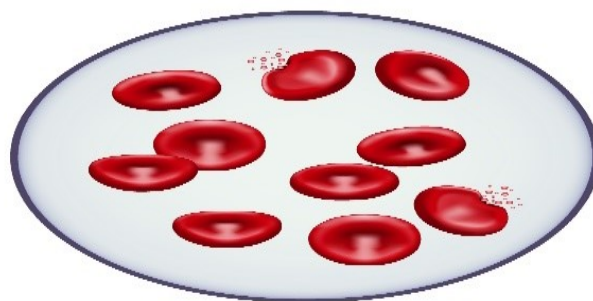
Voluntary Donation- The Bill explicitly promotes voluntary and non-remunerated blood donation to ensure an ethical supply chain, moving away from replacement or paid donation systems.

Enforcement

Penal Provisions- Introduction of strict penalties to act as a deterrent against unethical, unsafe, or non-compliant practices within the sector.



Normal



Thalassemia

Comparative Analysis- Current vs. Proposed Framework

Feature	Current Status (Pre-2025 Bill)	Proposed Status (National Blood Transfusion Bill, 2025)
Legal Basis	Executive Guidelines & Policies (DGHS/State Councils).	Statutory Law (Binding Act of Parliament).
Standards	Variable; differs across states and institutions.	Uniform National Standards for all processes.
Oversight	Fragmented; weak monitoring in some states.	Centralized Oversight via National Blood Transfusion Authority.
Accountability	Limited legal recourse for safety violations.	Strict Penal Provisions for non-compliance.
Traceability	Exists in silos; lacks interoperability.	Digital Traceability integration across public/private banks.

Strategic Advantages of the Bill

Legally Enforceable Safety- It elevates safety norms from "best practices" to statutory obligations, providing patients with legal recourse in cases of negligence.

Seamless Inter-State Transfer- By establishing uniform rules, the Bill reduces regulatory barriers, facilitating easier referrals and inter-state transfer of blood units during shortages.

Institutional Clarity- Hospitals and blood banks gain clear guidelines regarding registration, reporting, audits, and compliance, eliminating ambiguity.

Enhanced Emergency Safety- Strengthened protocols specifically target the reduction of transfusion-transmitted infections, crucial for emergency care.

Challenges in Implementation

Federal Issues (Centre-State)- Since Health is a State Subject, imposing uniform national standards may conflict with local administrative realities. Success depends on flexible implementation and strong cooperative federalism.

Infrastructure & Funding- Smaller blood banks in underserved areas may face **financial stress** due to compliance costs (upgrading cold chains, training staff). Without financial support, there is a risk of closure of these smaller units.

Capacity Constraints- The National Authority requires adequate laboratories, trained personnel, and real-time data systems to enforce rules effectively.

Digital Integration- Achieving **traceability** requires interoperable digital systems between disparate public and private entities without disrupting daily operations.

Focus on Thalassemia

About the Disease

Nature- A hereditary genetic disorder causing reduced or absent production of haemoglobin.

Physiological Impact- Defective haemoglobin synthesis leads to fragile, short-lived Red Blood Cells (RBCs).

Consequence- Results in chronic anaemia and reduced oxygen delivery to tissues.

Types- Classified into Alpha and Beta thalassaemia. *Thalassaemia Major* is the most severe form.

Symptoms- Fatigue, pallor, bone deformities, enlarged spleen, jaundice, and pulmonary hypertension.

Dependency- Severe cases require regular blood transfusions (every 2–4 weeks) for survival, making the safety and availability of blood a life-or-death issue for these patients.

Government Initiatives for Management

Thalassemia Bal Sewa Yojana (TBSY)- Implemented by the Union Health Ministry.

CSR Partner- Coal India Limited.

Benefit- Financial assistance of up to ₹10 lakh for Bone Marrow Transplantation.

Network- Available in 17 empanelled hospitals.

Screening Statistics (as of March 2025)

Total Screened- 15,87,903 individuals.

Identified Carriers- 50,462 individuals.

Conclusion

The National Blood Transfusion Bill, 2025, addresses a critical gap in India's healthcare architecture by prioritizing patient safety and supply chain integrity. While the transition may strain smaller institutions and require delicate Centre-State coordination, the move towards a statutory, uniform, and technology-driven blood transfusion system is essential for the welfare of transfusion-dependent communities like Thalassaemia patients.

Source- <https://www.thehindu.com/news/national/patients-welcome-introduction-of-the-national-blood-transfusion-bill-2025/article70392404.ece>

