

Ground-Level Data on Blood Emergency Issues

Fortex36 A National Level 36 hours Hackathon

Smart Blood Bank - Sanjeevni



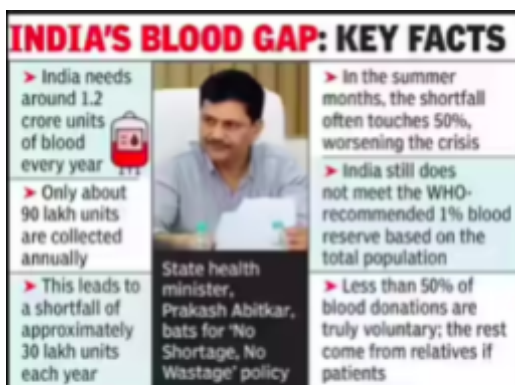
NEURAL SQUAD

Global & National News Evidence

Global Impact of Blood Shortages

Blood shortages remain a major global health challenge, particularly in low- and middle-income countries. Studies show that ineffective blood supply chains contribute significantly to preventable deaths.

- In **India**, lack of timely blood availability is estimated to contribute to **thousands of preventable deaths annually**, highlighting systemic gaps in emergency healthcare.
- In **sub-Saharan Africa**, research indicates that **around 26% of maternal hemorrhage-related deaths** are directly linked to blood shortages.
- Global studies associate **high mortality rates** with poorly managed blood supply systems, especially in regions with limited infrastructure.
- These deaths represent **healthcare system failures**, not medical limitations.



Global reports highlighting the impact of blood shortages on healthcare systems

Blood Supply Situation in India

India requires approximately **14.6 million blood units annually**, yet faces a **persistent shortfall of nearly 1 million units**, creating serious gaps in emergency and surgical care.

- Blood demand spikes during emergencies, festivals, and disasters

- Supply remains uneven across regions
- Rural and semi-urban areas are most affected



Blood shortages are causing thousands of preventable deaths globally, with an estimated 12,000 people dying daily in India alone due to lack of blood supply 2022.



REGIONAL & LOCAL (PUNE) DATA

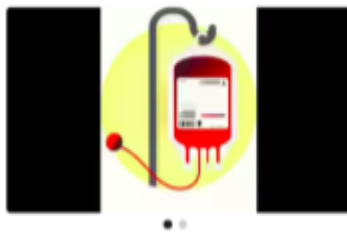
Blood Shortage in Pune

Pune is currently facing a **worrying shortage of blood**, with city-based blood banks urging citizens to donate. Every year after **Diwali**, blood donations drop sharply, worsening the situation.

- Pune requires **~1,500 blood bags daily**
- Current collections are significantly below requirement
- Shortages directly affect emergency treatments and surgeries

City blood banks face worst shortage in 2 yrs, surgeries postponed in at least one health hub

Neha Madan / Updated: Nov 30, 2025, 22:55 IST



Pune: Blood banks in the city are grappling with their steepest shortage in nearly two years as collections fail to keep pace with rising demand, forcing at least one hospital to postpone surgeries, representatives told TOI on Saturday.

Major blood banks said donations in Oct and Nov fell sharply below normal levels. Typically, the

crunch eases after the festive season, but the situation has barely improved this year. Dr Anand Chaphekar, chief blood transfusion officer at KEM Hospital, said, "Donor turnout always dips during festivals, but by Nov or Dec, things usually stabilise. This year, however, the improvement has been minimal. In recent six to seven camps, just 12 to 16 donors turned out per camp."

News article reporting acute blood shortage in Pune city

Local Blood Bank Data (Case Example)

One major blood bank reported:

- **19,649 units collected** between January–September 2025

- **293 donation drives** conducted during this period

- In **October**, collections dropped sharply to **~1,300 units only**

HEADLINES OF THE DAY

India faces severe blood shortage

May 16, 2024



Blood donation is critical to healthcare, saving millions of lives each year. However, the World Health Organization (WHO) reports significant disparities in blood donation rates across different income levels. High-income countries report 31.5 donations per 1,000 people, low-middle-income countries report 6.6, and low-income countries report a mere 5.0 donations.



The population need for blood is defined as the number of blood units required to transfuse all who require transfusion in a defined population over a certain period. Clinical demand is the total number of units of whole blood and components required to meet all blood transfusions for emergencies and elective procedures at health facilities over a defined period.

This sudden decline highlights how **seasonal and behavioral factors** impact blood availability.

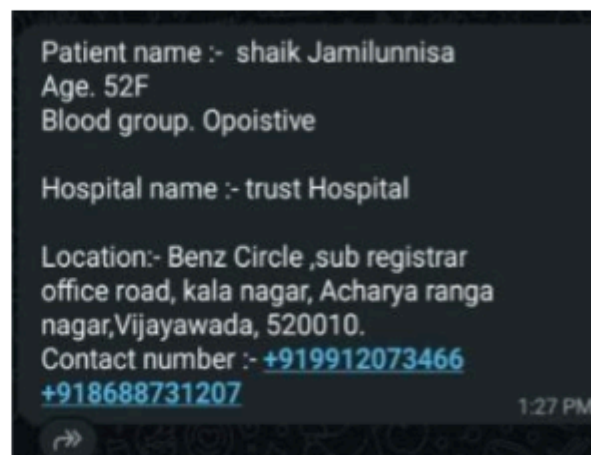
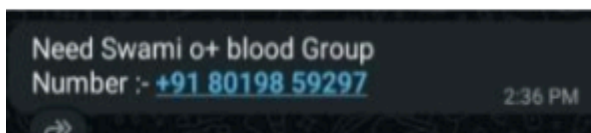
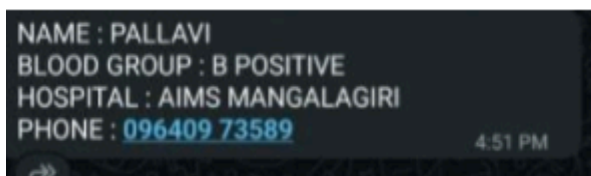
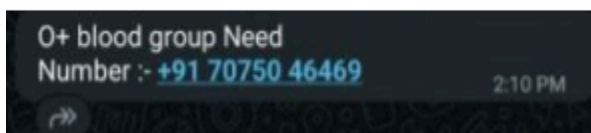
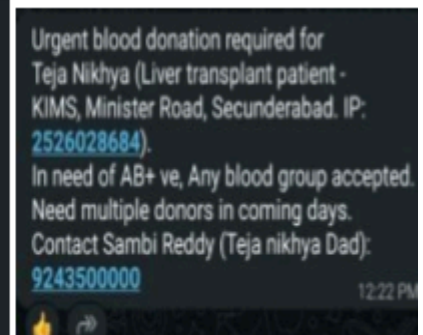
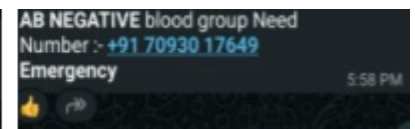
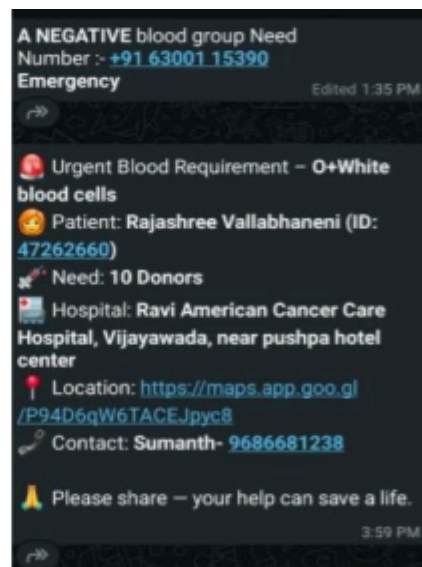
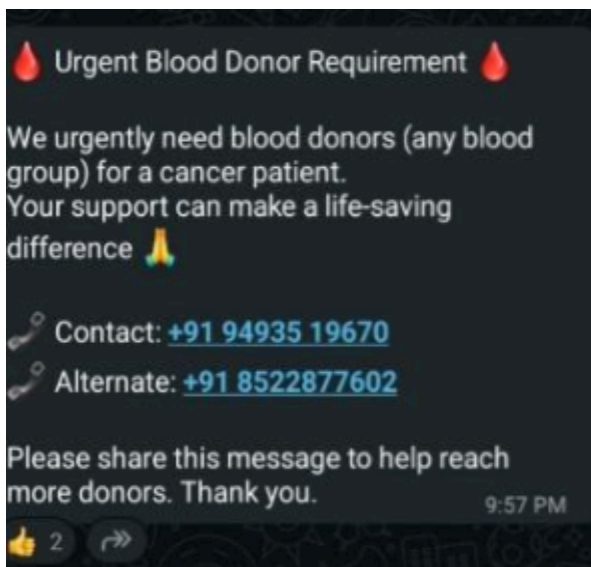
SOCIAL MEDIA & GROUND REALITY

Real Blood Requests from Local Area

During emergencies, people increasingly rely on **social media platforms** such as WhatsApp, Facebook, and Instagram to seek blood donors.

Common characteristics of these posts:

- High urgency (“needed within hours”)
- Repeated forwarding
- No centralized verification
- Lack of structured information



GOOGLE FORM DATA & SUMMARY

Public Survey (Google Form) Responses

To validate the issue further, a **local survey** was conducted to understand public awareness and experience related to blood availability.

Timestamp	Email address	Slack ID	Name	Profession	Q1. How do you hear of a person's donation?	Q2. Blood donation through which platform?	Q3. How you are motivated?	Q4. How often do you donate blood?	Q5. If blood donation and information were free?	Q6. Your blood group?
27/01/2026 20:01:06	hoshikaguchi@gmail		Rupesh	Student	No, personally	Blood group not available in nearby blood banks	Yes	Not aware of nearby blood donation camps	No, definitely	B+
27/01/2026 20:14:46	ufkankumar7800713		Umesh Kumar	Student	Yes, through news / social media	Delay in getting correct information	No, but I am willing to donate	Lack of proper information or guidance	No, definitely	A+
27/01/2026 20:14:58	permyanA5072@gmail		Theresa Ganesan	Student	Yes, through news / social media	Blood group not available in nearby blood banks	No, but I am willing to donate	Lack of proper information or guidance	Maybe	B positive
27/01/2026 20:20:34	lakshya123@gmail.co		Lakshya	Student	No	Lack of contact or coordination	Yes	Already Donated	Maybe	A+
27/01/2026 20:20:43	kumardhish@gmail		Gauri	Student	Yes, through news / social media	Delay in getting correct information	No, but I am willing to donate	Lack of proper information or guidance	No, definitely	O neg
27/01/2026 20:27:16	prakash_dj@gmail.co		Prakash	Student	Yes, through news / social media	Blood group not available in nearby blood banks	No, but I am not willing to donate	Fear or health concerns	Maybe	A+
27/01/2026 20:28:38	harsh_dubhai@gmail		Harsh Dubhai	Student	Yes, through news / social media	Blood group not available in nearby blood banks	Yes	Never get proper opportunity	No, definitely	O+
27/01/2026 20:30:41	soniya_pandey84@gmail		Sonika Pandey	Student	Yes, through news / social media	Dependence on social media / personal contacts	No, but I am not willing to donate	Fear or health concerns	Maybe	B neg
27/01/2026 20:30:57	sohankumawat000		S. Siva Shivan	Student	No, personally	Blood group not available in nearby blood banks	Yes	Not aware of nearby blood donation camps	No, definitely	O+
27/01/2026 20:31:37	harshithdub@gmail.co		Harshith Dubai	Student	No, personally	Blood group not available in nearby blood banks	No, but I am not willing to donate	Fear or health concerns	Maybe	O+
27/01/2026 20:32:47	blush.pandey@gmail		S. Chhavi	Student	Yes, through news / social media	Blood group not available in nearby blood banks	No, but I am not willing to donate	Never get proper opportunity	No	B positive
27/01/2026 20:33:01	umangkumar070@gmail		Umang Kumar	Student	No	Delay in getting correct information	No, but I am willing to donate	Lack of proper information or guidance	No, definitely	A+
27/01/2026 20:33:40	soorabh_goon@gmail		Soorabh Goon	Student	No	Blood group not available in nearby blood banks	No, but I am not willing to donate	Fear or health concerns	No	B+
27/01/2026 20:34:40	um712@gmail@gmail		Shivani	Student	No	Blood group not available in nearby blood banks	No, but I am not willing to donate	Fear or health concerns	No	A+
27/01/2026 20:39:36	gha@gmail.com		Pratik Sax	Student	Yes, through news / social media	Blood group not available in nearby blood banks	No, but I am not willing to donate	Fear or health concerns	Maybe	A+
28/01/2026 09:09:27	gargahemalshid@gmail		Arshika Lakshmi	Student	Not sure	Blood group not available in nearby blood banks	No, but I am willing to donate	Not aware of nearby blood donation camps	Maybe	
28/01/2026 09:10:10	adithyan112@gmail.co		Adithi	Student	Yes, through news / social media	Blood group not available in nearby blood banks	No, but I am willing to donate	Never get proper opportunity	No, definitely	B+
28/01/2026 09:10:36	anupama78@gmail		Anura Singh	Student	No, personally	Dependence on social media / personal contacts	No, but I am not willing to donate	Fear or health concerns	Maybe	B+
28/01/2026 09:10:38	prajwal@gmail.co		Prajwal Singh	Businessman	Yes, through news / social media	Blood group not available in nearby blood banks	No, but I am willing to donate	Lack of proper information or guidance	No, definitely	B neg
28/01/2026 09:10:53	netiprakash@gmail.co		Pranav Prakash Singh	Student	Yes, through news / social media	Lack of contact or coordination	No, but I am willing to donate	Never get proper opportunity	No, definitely	A+
28/01/2026 09:10:52	netiprakash@gmail		Pranav Prakash Singh	Student	Yes, through news / social media	Dependence on social media / personal contacts	No, but I am willing to donate	Lack of proper information or guidance	No, definitely	B+
28/01/2026 09:10:53	prakashsingh@gmail.co		Om Singh	Student	No, personally	Blood group not available in nearby blood banks	No, but I am willing to donate	Not aware of nearby blood donation camps	No, definitely	A+
28/01/2026 09:10:51	000000@gmail.com		Sahar Kumar Yadav	Student	Yes, through news / social media	Lack of contact or coordination	No, but I am willing to donate	Not aware of nearby blood donation camps	No, definitely	O+
28/01/2026 09:10:26	prakash007@gmail		Pratik Tiwari	Student	Yes, through news / social media	Delay in getting correct information	No, but I am willing to donate	Not aware of nearby blood donation camps	No, definitely	O+
28/01/2026 09:10:30	sohamkumar0712		Sohan Singh	Student	No, personally	Lack of contact or coordination	No, but I am not willing to donate	Lack of time	Maybe	B+
28/01/2026 09:10:36	shankarsharma07@gmail		Shivan Sharma	Student	No, personally	Blood group not available in nearby blood banks	No, but I am willing to donate	Never get proper opportunity	No, definitely	B+
28/01/2026 09:12:16	sohansharma072@gmail		Sohan Kumar	Student	No, personally	Blood group not available in nearby blood banks	No, but I am willing to donate	Never get proper opportunity	No, definitely	A+
28/01/2026 09:14:47	sohan07112@gmail		Indira Krishna Singh	Student	Yes, through news / social media	Blood group not available in nearby blood banks	No, but I am willing to donate	Fear or health concerns	No, definitely	A positive
28/01/2026 09:14:04	harshithdubhai@gmail		Harshith Dubhai	Student	No, personally	Blood group not available in nearby blood banks	No, but I am willing to donate	Lack of proper information or guidance	No, definitely	O+
28/01/2026 09:20:49	harshithdubhai@gmail		Harshith Dubhai	Student	Yes, through news / social media	Blood group not available in nearby blood banks	No, but I am willing to donate	Never get proper opportunity	No, definitely	O+
28/01/2026 09:44:16	anupamgarg0704@gmail		Prasen Singh	Not sure	Not sure	Vip system	No, but I am not willing to donate	I will keep the word "Never" like "Yes"	No, definitely	B+
28/01/2026 09:45:26	prakash0700@gmail		Pratik Singh	Student	Yes, through news / social media	Blood group not available in nearby blood banks	No, but I am willing to donate	Never get proper opportunity	No, definitely	A+

28/01/2026 08:02:49	harshithdubhai@gmail	Harshitha dubbaku	Student	Yes, through news / social media	Blood group not available in nearby blood banks	No, but I am willing to do
28/01/2026 08:44:15	anampatapsingh0542@gmail	Pravesh singh	Student	Not sure	Vip system	No, and I am not willing to
28/01/2026 09:02:26	prachisingh0804vaibhav	Prachi Singh	Student	Yes, through news / social media	Blood group not available in nearby blood banks	No, but I am willing to do
28/01/2026 09:09:35	manas_garkapati@gmail	Manas	Student	Yes, through news / social media	Lack of contact or coordination	No, and I am not willing to
28/01/2026 09:44:29	mukansingh4011@gmail	Muskan Singh	Student	Yes, through news / social media	Lack of contact or coordination	No, but I am willing to do
28/01/2026 09:46:51	muskan_singh@gmail.co	Muskan	Student	Yes, through news / social media	Lack of contact or coordination	No, but I am willing to do
28/01/2026 09:49:26	manysahivastav9973@gmail	Manya	Student	Yes, through news / social media	Blood group not available in nearby blood banks	No, but I am willing to do
28/01/2026 10:15:10	nikul_kumar@gmail.co	Kusuma nikul	Student	Yes, personally	Lack of contact or coordination	No, but I am willing to do
28/01/2026 10:16:01	manya_singh@gmail.co	Manya	Student	Yes, personally	Blood group not available in nearby blood banks	Yes
28/01/2026 10:17:37	aditi.gupta@gmail.co	Aditi Gupta	Student	Yes, through news / social media	Blood group not available in nearby blood banks	No, but I am willing to do
28/01/2026 10:17:50	indrakshi_panda@gmail	Indrakshi panda	Student	Yes, through news / social media	Blood group not available in nearby blood banks	No, but I am willing to do
28/01/2026 10:25:37	pradip_r@gmail.co.in	Pradip	Student	Yes, through news / social media	Blood group not available in nearby blood banks	No, but I am willing to do
28/01/2026 10:38:53	cbharyad48@gmail.co	Bharya Chauhan	Student	Yes, personally	Blood group not available in nearby blood banks	Yes
28/01/2026 10:39:16	jaganranamhs232@gmail	Pulke Jays naranamha	Student	Yes, through news / social media	Delay in getting correct information	Yes
28/01/2026 11:06:07	om07270@gmail.com	Om Tripathi	singer	Yes, through news / social media	Dependence on social media / personal contacts	Yes
28/01/2026 11:06:51	sochhgaming53@gmail	Soan Singh	Book reading	Yes, through news / social media	Blood group not available in nearby blood banks	Yes
28/01/2026 11:08:05	ajmenaden@gmail.com	Riya tiwari	Traveling	Yes, through news / social media	Blood group not available in nearby blood banks	Yes
28/01/2026 11:08:48	ajmenaden@gmail.com	Riya tiwari	Traveling	Yes, through news / social media	Blood group not available in nearby blood banks	Yes
28/01/2026 11:09:17	hemant2008@gmail.co	Hemant	Student	Yes, through news / social media	Lack of contact or coordination	No, and I am not willing to
28/01/2026 11:10:40	wordlovers@gmail.com	Rajeev tripathi	Politics	Yes, through news / social media	Blood group not available in nearby blood banks	Yes
28/01/2026 11:19:35	shauryandyoshi@gmail.co	Shaurya Mishra	Student	Yes, through news / social media	Blood group not available in nearby blood banks	No, but I am willing to do

This is the data which we have collected within 24 hr this data shows:

- Many are **willing to donate** but lack information
- There is **no centralized awareness platform**