



**MINISTRY OF HEALTH
LUAPULA PROVINCE
MANSA PROVINCIAL BLOOD BANK**

UPDATE BLOOD AND BLOOD PRODUCT AVAILABILITY

27th December 2024

BACK GROUND

The National Blood Transfusion Services in Zambia plays a critical role in saving lives and improving health outcomes. The Provincial Health Office, through its blood unit, strives to ensure a safe and adequate blood supply for therapeutic use in Luapula Province.

Blood Collection Trends (2017-2023)

From 2017 to 2023, the average annual blood collection was 9,925 units. However, the crude discard rate was approximately 19%, with 4% attributed to HIV, 5% to HBV, 4% to HCV, and 6% to syphilis.

2023 Blood Collection and Demand

In 2023, 9,499 blood units were collected, falling short of the provincial requirement of 15,600 units (60% achievement). The unmet need for blood and blood products exceeds 30%. The increasing population in Luapula Province, from 1.3 million to 1.55 million, has escalated the demand for blood to 18,000 units per annum.

Partnerships and Support

The Ministry of Health, Central Level, and key Implementing Partners (IPs) like Basal Medical Cooperation Association and USAID-PAMD have collaborated to mobilize resources and improve blood and blood product availability.

Challenges and Future Plans

Despite the support, the province faced challenges in January 2024 due to a central stockout of blood collection packs and reagents. This resulted in a limited blood collection of only 135 units in January 2024. However, with the support from BMAC (K604,811) and the incorporation of the plan and budget into the Mid-Term Expenditure Framework (MTEF) for 2024-2026 from the Government of the Republic of Zambia, improvement has been noted.

Notable Improvements in Luapula Province's Blood Bank

1. **Increased Government Funding:** The Government of the Republic of Zambia has increased funding for blood bank operational inputs, demonstrating its commitment to improving healthcare services.
2. **Partnership with Basel Association for Medical Cooperation (BAMC):** BAMC has provided financial support to ensure 100% availability of safe blood in Luapula Province, underscoring the importance of collaborative efforts in achieving healthcare goals.
3. **Improved Supply Chain Management:** The supply of essential blood collection materials has been enhanced, including:
 - a. Blood bags
 - b. Donor therapeutic supplies via the ZAMMSA contractual framework
 - c. Reagents for the blood testing machine slowly stabilizing
4. **Enhanced Logistics:** An additional new vehicle has been provided to support blood collection activities, facilitating the transportation of blood and medical supplies.

These improvements demonstrate the progress made in strengthening the blood bank services in Luapula Province. The Provincial Health Office through the blood bank center is committed to improving blood collection and supply in Luapula Province.

PERFORMANCE PROGRESS 2024

As of February 2024, blood collection activities at the blood bank centre have been successfully revamped. This positive development is largely attributed to the timely provision of essential blood collection supplies by the central level, specifically the Ministry of Health, ZNBTS, and ZAMMSA. With these supplies in place, the blood bank centre is now fully operational and on track to meet its blood collection goals.

Month	Target	Collected	Collection %	Gap	Comment
Jan-24	1600	135	8%	1465	Blood Collection supplies stock out
Feb-24	1600	1609	101%	-9	Target Reached
Mar-24	1600	1681	105%	-81	Target Reached
Apr-24	1600	1117	70%	483	Low donor Turn out
May-24	1600	1524	95%	76	Low donor Turn out
Jun-24	1600	1317	82%	283	Low donor Turn out
Jul-24	1600	1530	96%	70	Low donor Turn out
Aug-24	1600	1377	86%	223	Low donor Turn out
Sep-24	1600	1561	98%	39	Low donor Turn out
Oct-24	1600	1600	100%	0	Target Reached
Nov-24	1600	1589	99%	11	Low donor Turn
Dec-24	1600	1509	94%	91	Blood Collection still in progress
Total	19200	16549	86%	2651	

Comment:

1. Low donor turns out leading to extended blood collection period

BLOOD DISTRIBUTION TO TRANSFUSION CENTERS

NO	NAME OF FACILITY	Jan-24	Feb-24	Mar-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Total	Average % Consumption by Facility
T1	Chembe Min Hospital	7	36	36	40	45	38	38	28	38	306	3%
T2	Chiengi District Hospital	10	59	53	60	75	52	52	116	55	532	6%
T3	Kasaba Mission Hospital	3	36	42	41	27	49	35	47	47	327	3%
T4	Kawambwa District Hospital	13	53	46	49	86	48	47	73	58	473	5%
T5	Lubwe Mission Hospital	9	39	39	33	47	45	43	49	46	350	4%
T6	Lwela Min Hospital	6	6	6	6	8	8	8	8	8	64	1%
T7	Mambilima Mission Hospital	12	19	25	17	28	38	38	49	46	272	3%
T8	Mansa District Hospital	0	26	29	29	32	26	23	38	26	229	2%
T9	Mansa General Hospital	45	559	559	554	416	448	428	655	347	4011	42%
T10	Mbereshi Mission Hospital	8	55	50	55	55	42	38	70	54	427	4%
T11	Milenge District Hospital	8	28	27	28	33	22	21	40	38	245	3%
T12	Mwense District Hospital	8	40	40	42	42	50	40	50	35	347	4%
T13	Nganda Bilonda District Hospital	0	0	0	0	0	0	0	30	28	58	1%
T14	Samfya District Hospital	10	59	70	63	51	42	37	73	46	451	5%
T15	Senama Level I	5	5	6	5	8	8	8	11	8	64	1%
T16	St. Paul's Mission Hospital	17	248	245	317	160	109	103	138	107	1444	15%
	Total	161	1268	1273	1339	1113	1025	959	1475	987	9600	

Comment:

1. November 2024 not captured yet
2. Average % Consumption calculated from Total Blood Units Distributed to Transfusion centres
3. Nganda Bilonda District Hospital Newly activated site
4. Scaled down supplying more units to St Pauls Mission to prevent expiries that were recorded in June and previous months. Currently monitoring the consumption trends.

KEY UPDATES HUB OPERATIONALIZATION

St Pauls Has Received the equipment below



- Standard Storage Facilities
- 1 Refrigerator
 - ✓ Whole/RCC
 - 1 Freezer -80
 - ✓ FFP/Cryoprecipitate

- 3 Cooler Boxes
- Quality and Proper Transportation of Blood

- 4 Temperature loggers
- Monitoring during Transportation

Note > *The Lab is currently undergoing minor renovation with support from MOH-PHO Global funds to improve Lab work flow*

OPPORTUNITIES FOR IMPROVEMENT

No	Challenge	What is being done	Long Term Solution
1.	Low donor turnouts in Schools as primary blood collection sites	<ol style="list-style-type: none"> 1. Joint Visit with Ministry of Education done for 12 District Education Board Secretaries 2. Identification of Focal Point persons at DEBS and Schools 3. Community Engagement through radio programs. 	<ol style="list-style-type: none"> 1. Stake holder engagement meeting Parents and Teachers 2. Quarterly Joint Visit with Ministry of Education to consistently raise awareness of blood donation at DEBS 3. Recommendation to vary funds to support this key input
2.	Unstable Power supply for the blood	<ol style="list-style-type: none"> 1. Use of the Generator Mansa General hospital and Blood Bank as back up 	<ol style="list-style-type: none"> 1. Exemption of Mansa General Hospital from Load Management

	testing voltage below 230V as input	2. Reducing equipment Load on the line supplying power to Blood Bank centre	2. Procurement of new UPS support the machine in case of sudden power cut.
3.	Storage space at central blood bank 4/6 are functional	1. Temporal outsourcing of fridges at PHD 2. Efficient Processing of Donor blood units for quick distribution in order to create space 3. Constant Monitoring	1. Renovation Project the Provincial Blood bank under World Bank (The Package also include storage facilities)

Focus Area: Enhancing Blood Donation and Supply Chain Efficiency

1. Improving Donor Turnover among Pupils and Students

- ✓ To meet the monthly target of 1,600 blood units, we will collaborate with the Ministry of Education to increase donor turnout among eligible pupils and students.

Key Strategies:

1. **Re-mapping of Schools:** Identify and re-map problematic schools for targeted education and sensitization activities.
2. **Engagement with School Management and Guardians:** Foster partnerships with Parent-Teacher Committees to promote blood donation awareness and encourage participation.

2. Quarterly Procurement of Blood Bank Supplies

- ✓ The objective is to ensure efficiency and reduce lead times, we will implement quarterly procurement of essential blood bank supplies, including:
 - Fuel
 - Other critical blood bank supplies

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