National Center for HIV/AIDS Dermatology and STD

Quarterly report on the point of care for HIV viral load for pregnant and breastfeeding women and exposed infants using GeneXpert.

Quarter 3, 2026

1. Executive Summary

This report presents a comprehensive overview of the Point-of-Care Prevention of Mother-to-Child Transmission (POC-PMTCT) program's Early Infant Diagnosis (EID) and Viral Load (VL) Diagnostics activities for Quarter 3 (Q3) of 2026, covering the period from July 1, 2026, to September 30, 2026. Key performance indicators, including testing volumes, positivity rates, and turnaround times, are detailed, alongside a breakdown of results by testing line and site.

2. Early Infant Diagnosis (EID) Diagnostics

2.1. Overall Performance

- ***Total Number of Tests:*** 117 tests conducted.
- ***Total Number of Unique Infants Tested:*** 104 infants.
- ***Positive Infants Identified:*** 3.
- ***Positivity Rate:*** 2.88% of total number of unique infants tested.
- ***Average Turnaround Time (TAT) for EID:*** 11 Hours and 48 Minutes.

2.2. EID Results by Test Outcome

Result	Total of Test	*Percentage (%)*
Positive	5	*4.27%*
Negative	110	*94.02%*
Invalid	2	*1.71%*
Total	**107**	***100.00%***

Note: Invalid includes invalid, error, and no result.

2.3. Number of Infants by Result

Result	Total of Test	*Percentage (%)*
Positive	3	*2.88%*
Negative	100	*96.15%*
Invalid	1	*0.96%*
Total	**104**	***100.00%***

Note: Count unique patient ID by result.

2.4. EID Testing in Line Analysis

This section details the distribution of EID tests across different testing lines.

EID Testing Line	Number of Tests	*Percentage (%)*	Infants Tested (Unique ID)
PCR at birth	47	***40.17%***	44
PCR at 4-6 weeks	32	***27.35%***	31
PCR at 9 months	32	***27.35%***	31
Confirmatory PCR	4	***3.42%***	4
Other	2	***1.71%***	2
Total	**117**	***100.00%***	**112**

Note: Infants Tested (Unique ID) counts unique patient IDs at each testing line. Sum of unique IDs can exceed total infants due to multiple tests per infant.

2.5. EID Results by Testing Line (Positive, Negative, Invalid)

Testing in Line	Positive	Negative	Invalid
PCR at birth	1	44	2
PCR at 4-6 weeks	1	31	0
PCR at 9 months	0	32	0
Confirmatory PCR	3	1	0
Other	0	2	0

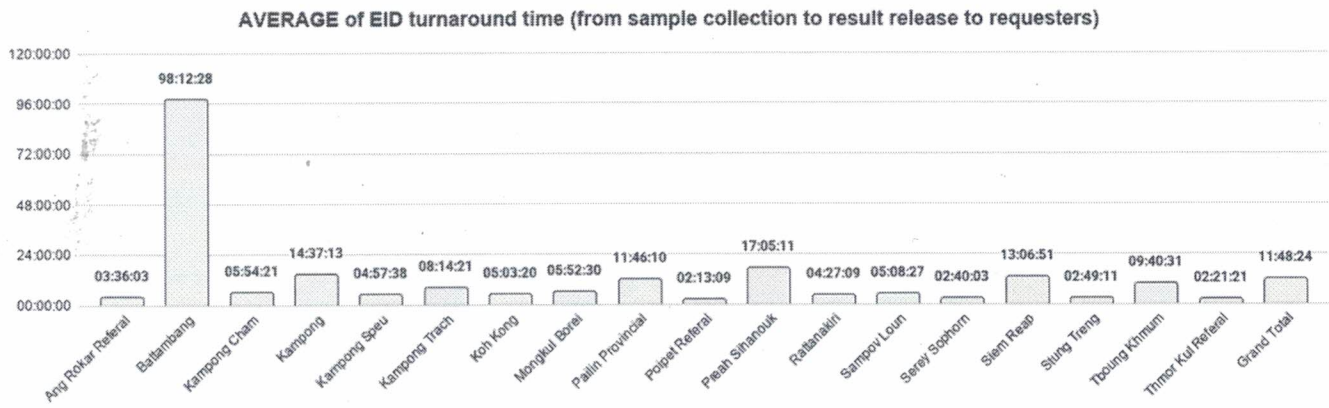
2.6. EID Testing by Site

A total of 117 EID tests were conducted across various sites:

№	Provincial/Referral Hospital Name	Number of Tests
1	Ang Rokar Referral Hospital	3
2	Cambodia-Japan Friendship Mongkul Borey Provincial Hospital	5
3	Kampong Cham Provincial Hospital	14
4	Kampong Speu Provincial Hospital	8
5	Kampong Trach Referral Hospital	5
6	Pailin Provincial Hospital	5
7	Poipet Referral Hospital	3
8	Preah Sihanouk Provincial Hospital	8
9	Rattanakiri Provincial Hospital	0
10	Sampov Loun Referral Hospital	4
11	Serey Sophorn Referral Hospital	6
12	Siem Reap Provincial Hospital	14
13	Stung Treng Provincial Hospital	1
14	Preah Norodom Sihanouk Tbong Khmum Referral Hospital	8
15	Thmor Kul Referral Hospital	2
16	Battambang PH	16

17	Kampong Chhnang PH	8
18	Koh Kong PH	3
19	Kratie PH	0
20	Oddor Meanchey PH	0
21	Prey Veng PH	3
22	Pursat PH	0
23	Svay Rieng PH	1

2.7. *Average Turnaround Time (TAT) for EID By Sites*



2.8. EID Testing Trend (Q3 2026)

Month	Test Count
July	31
August	44
September	42
Total of tests for Q3 2026	**117**

3. Viral Load (VL) Diagnostics

3.1. Overall Performance

- ***Total Number of Tests:*** 17 tests conducted.
- **Total Number of Pregnancy/Breastfeeding Tests:** 17.
- **Detected Pregnancy/Breastfeeding Cases:** 6.
- **Positivity Rate:** 35.29%.
- **Average Turnaround Time (TAT) for Pregnancy/Breastfeeding-VL:** 5 Hours and 47 Minutes.

3.2. Mother Testing by Result

Result	Number of Tests	*Percentage (%)*
VL: Detected $\geq$ **1000 copies/mL**	5	***29.41%***
VL: Detected $\geq$ **40 – 999 copies/mL**	1	*5.88%*
VL: Undetected <40 **copies/mL**	11	*64.71%*
Total	**17**	***100.00%***

Note: Invalid includes invalid, error, and no result.

3.3. Reason for Testing

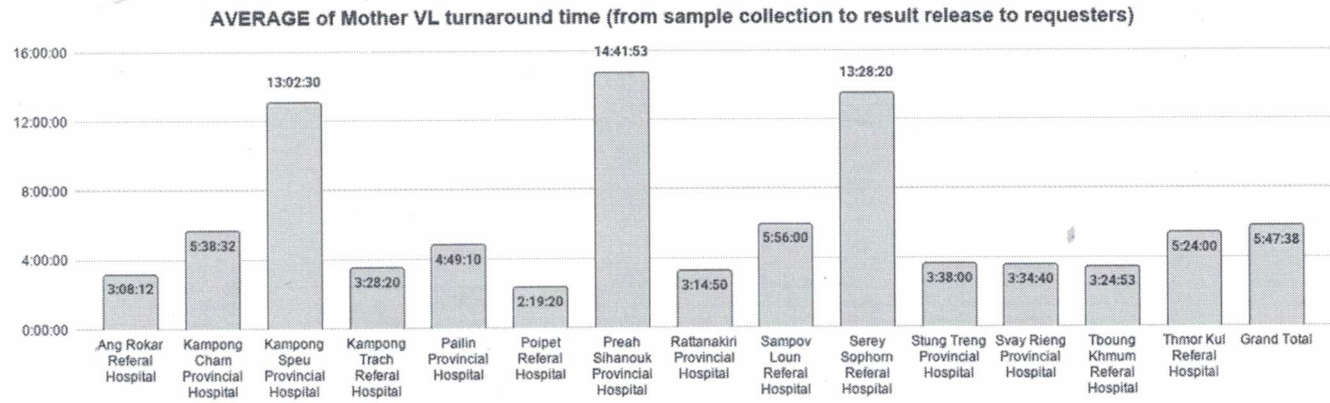
Reason	Number of Test	*Percentage (%)*
Pregnancy	15	***88.24%***
Breastfeeding	1	*5.88%*
Other	1	*5.88%*
Total	**17**	***100.00%***

3.4. Number of Mother Testing by Site

A total of 17 VL tests were conducted for mothers across the following sites:

Nº	Provincial/Referral Hospital Name	Number of Tests
1	Ang Rokar Referral Hospital	1
2	Cambodia-Japan Friendship Mongkul Borey Provincial Hospital	3
3	Kampong Cham Provincial Hospital	0
4	Kampong Speu Provincial Hospital	0
5	Kampong Trach Referral Hospital	0
6	Pailin Provincial Hospital	2
7	Poipet Referral Hospital	0
8	Preah Sihanouk Provincial Hospital	4
9	Rattanakiri Provincial Hospital	0
10	Sampov Loun Referral Hospital	0
11	Serey Sophorn Referral Hospital	0
12	Siem Reap Provincial Hospital	0
13	Stung Treng Provincial Hospital	0
14	Preah Norodom Sihanouk Tbong Khmum Referral Hospital	2
15	Thmor Kul Referral Hospital	0
16	Battambang PH	1
17	Kampong Chhnang PH	0
18	Koh Kong PH	0
19	Kratie PH	0
20	Oddor Meanchey PH	2
21	Prey Veng PH	1
22	Pursat PH	0
23	Svay Rieng PH	1

3.5. *Average Turnaround Time (TAT) for VL By Sites*



4. Conclusion

In Q3 2026, the POC-PMTCT program demonstrated strong operational performance. The program successfully conducted Early Infant Diagnosis (EID) for 104 unique infants, identifying **3 HIV-positive cases (2.88%)** with a rapid average turnaround time (TAT) of **11 hours and 48 minutes**. For maternal Viral Load (VL) testing, a total of 17 tests were performed with an average TAT of **5 hours and 47 minutes**. While infant positivity remains low, the **35.29%** viral detection rate among pregnant and breastfeeding mothers (6 out of 17 tested, including **5 cases with VL $\geq$ 1000 copies/mL**) highlights a critical priority area for clinical management and ART adherence support. These results validate the efficiency of the GeneXpert point-of-care platform in providing rapid diagnostics necessary to accelerate the elimination of mother-to-child HIV transmission.

Phnom Penh, Date: October 13, 2026

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