



# Newborn Screening Quality Assurance Program

## PROFICIENCY TESTING PROGRAM FOR ANTI-HIV-1 IN DRIED BLOOD SPOTS

Quarterly Report

Quarter 2

May 2011

### INTRODUCTION

The Anti-HIV-1 proficiency testing (PT) panel for Quarter 2, 2011, consisted of five individual-matrix dried-blood spot (DBS) specimens representing a variety of serostatuses. HIV antibody screening and confirmatory tests should identify all HIV-positive specimens, regardless of subtype. Method and laboratory performance are evaluated by challenging participants with specimens representing HIV-negative and positive serostatuses.

On April 11, 2011, we sent the Quarter 2 Anti-HIV-1 panel to 26 total participants. We received data reports from 24 participating laboratories by the designated deadline date. This report is the outcome of data reported for the Quarter 2, 2011, Anti-HIV-1 PT specimens. This quarterly report is distributed to all participants and to program colleagues upon request.

Each participant was asked to analyze the specimens for anti-HIV-1 using the assay schemes they routinely use and to report for each

specimen the screening results along with results from any confirmatory assays performed for presumptive positives. A final interpretation for each specimen must be submitted to receive a grade.

### PARTICIPANTS' RESULTS

Table 1 shows the overall frequency of reported reactive, non-reactive, and indeterminate screening results for specimens 2141-2145.

In Part 1 of the report, Table 2 shows the number of laboratories using each screening method/kit both for the primary and secondary screens.

Table 3 shows the summary of screening errors by method.

In Part 2 of the report, Table 4 shows the number of laboratories using each confirmatory method/kit.

Table 5 shows the Reported Frequency of Bands by Western Blot for each of the PT specimens that tested positive for the Anti-HIV-1 screening analysis.

The Quality Assurance Program will ship next quarter's HIV-1 DBS proficiency testing specimens and the next major allotment of HIV-1 DBS quality control specimens on July 18, 2011.

### CONFERENCES / MEETINGS

2011 National HIV Prevention Conference, Atlanta, Georgia. August 14-17, 2011.

United States Conference on AIDS, Chicago, IL, November 10-13, 2011.



Direct inquiries to:  
Centers for Disease Control and Prevention (CDC)  
4770 Buford Highway, NE, MS/F43  
Atlanta, GA 30341-3724

Quarterly publications for colleagues and participants of the Proficiency Testing Program for Anti-HIV-1 in Dried Blood Spots.

Phone: 770-488-7897  
FAX: 770-488-4255  
E-mail: [NMeredith@cdc.gov](mailto:NMeredith@cdc.gov)

Editor: Nancy Meredith  
Production: Connie Singleton



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**TABLE 1: Frequency Distribution: Outcome of Final Interpretations (#Labs)**

<b>Specimen Number</b>	<b>Expected Results</b>	<b>Reactive</b>	<b>Non-Reactive</b>	<b>Indeterminate</b>	<b>Not Reported</b>
2141	Non- Reactive	0	24	0	2
2142	Reactive	23	0	1	2
2143	Reactive	22	0	2	2
2144	Non-Reactive	0	24	0	2
2145	Non-Reactive	24	0	0	2

**Part 1. SCREENING**

**TABLE 2: Number of Screening Methods Reported; Includes Primary and Secondary Methods**

<b>Method Code</b>	<b>Kit Source</b>	<b>Participants</b>
10	Fujirebio Serodia-HIV 1,2	2
11	In House	1
12	Other (Please specify in detail)	3
15	rLAV EIA (Bio-Rad)	1
27	Tecnosuma (Cuba) UMELISA HIV 1+2	1
34	Q-Preven HIV 1+2, DBS, Brazil	1
40	Avioq HIV-1 Microeleisa Systems	10
41	Bio-Rad HIV-1/HIV-2 plus O EIA	3
		Total 22

Note: Two laboratories did not report data and two laboratories reported final interpretations based on confirmatory tests only.

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**All Methods**

- 10 Fujirebio Serodia-HIV 1,2
- 15 Genetic Systems rLAV EIA (Bio-Rad)
- 27 Tecnosuma (Cuba) UMELISA HIV 1+2
- 34 Q-Preven HIV 1+2, DBS, Brazil
- 40 Avioq HIV-1 Microeleisa Systems
- 41 Bio-Rad HIV-1/HIV-2 plus O EIA
- 11 In House
- 12 Other
- 16 Genetic systems HIV-1 WB Kit (Bio-Rad)

2141		2142		2143		2144		2145	
FP	IND	FN	IND	FN	IND	FP	IND	FP	IND
					1				
			1		1				

**False Pos = 0**  
**False Neg = 0**  
**Indeterminant = 3**



This **NEWBORN SCREENING QUALITY ASSURANCE PROGRAM** report is an internal publication distributed to program participants and selected program colleagues. The laboratory quality assurance program is a project cosponsored by the **Centers for Disease Control and Prevention (CDC)** and the **Association of Public Health Laboratories**.

**CENTERS FOR DISEASE CONTROL AND PREVENTION (CDC)**  
**ATLANTA, GA 30341**

**Director**

Thomas R. Frieden, M.D., M.P.H.

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**National Center for Environmental Health**

Christopher J. Portier, Ph.D.

**Director**

**Division of Laboratory Sciences**

James L. Pirkle, M.D., Ph.D.

**Chief**

**Newborn Screening and Molecular Biology Branch**

Carla Cuthbert, Ph.D.



**Contributors:** Barbara W. Adam  
Brandon Beasley  
Carol Bell  
Dana Chafin  
Paul Dantonio  
Sharon Flores  
Victor R. De Jesus, Ph.D.  
Marie C. Earley, Ph.D.  
Tamara Ganka  
Elizabeth M. Hall  
Christopher Haynes, Ph.D.  
Francis Lee, Ph.D.  
Lixia Li, Ph.D.  
Timothy Lim, Ph.D.  
Joanne Mei, Ph.D.  
Nancy Meredith  
David Simms  
Robert Vogt, Ph.D.  
Golriz Yazdanpanah  
Hui Zhou, Ph.D.  
Sherri Zobel

**Production:** Sarah Brown  
Felicia Manning  
Teresa Moore  
Connie Singleton

**ASSOCIATION OF PUBLIC HEALTH LABORATORIES**  
**SILVER SPRING, MD 20910**

**President**

Patrick F. Luedtke, M.D., M.P.H.

**Co-Chairpersons, Newborn Screening and Genetics in Public Health Committee**

Cheryl Hermerath, M.B.A., DLM(ASCP), RM(NRCM)

Susan M. Tanksley, Ph.D.

**Chairman, Newborn Screening Quality Assurance Quality Control Subcommittee**

Gary Hoffman, B.S.



**INQUIRIES TO:**

*Nancy Meredith, Editor • Centers for Disease Control and Prevention (CDC)*  
*Newborn Screening Quality Assurance Program • Mailstop F-43*  
*4770 Buford Highway, N.E. • Atlanta, GA 30341-3724*  
*Phone (770) 488-4582 • FAX (770) 488-4255 • E-mail: NMeredith@cdc.gov*