Mycobacteriology Proficiency Testing Program
March 2013 Results Summary

Samples 13-1G, 13-1I and 13-1J contained *Mycobacterium tuberculosis.* Sample 13-1H contained *Mycobacterium bovis.* Sample 13-1F contained *Mycobacterium kansasii*

I. Microscopy

EXPECTED RESULTS:

	Acid Fast Bacilli
13-1A	Present
13-1B	Absent
13-1C	Absent
13-1D	Absent
13-1E	Present

SCORES FOR MICROSCOPY (103 PARTICIPANTS):

	Comprehensive Labs	Restricted Labs	Smears Only Labs	Total
100%	17	43	36	96
80-89%	0	3	2	5
<80%	2*	0	0	2

* 1 laboratory failed the microscopy event due to late submission of results

	13-1A	13-1B	13-1C	13-1D	13-1E
Correct answer	102	100	101	102	103
Incorrect answer	1	3	2	1	0

STAINING METHOD

Carbol Fuschin: 47 laboratories (46%)

Carbol Fuschin + Flurochrome: 24 laboratories (23%)

Flurochrome: 32 laboratories (31%)

II. Identification/Drug Susceptibility

SCORES FOR ID

	Comprehensive Labs	Restricted Labs
100%	18	44
90-99%	1	0
80-89%	0	1
< 80%	0	1*

* Laboratory failed the ID event due to late submission of results

SCORES FOR SUSCEPTIBILITY

	Comprehensive Labs
100%	17
90-99%	1

One laboratory was exempt

OVERALL SCORES (MICROSCOPY, ID AND SUSCEPTIBILITY)

	Comprehensive Labs	Restricted Labs
100%	15	42
90-99%	2	2
80-89%	1	1
< 80%	1	1

RESULTS FOR 13-1F (*Mycobacterium kansasii*)

Identification

Result*	Method	Restricted	Comprehensive
M. kansasii	GenProbe/Accuprobe	**24**	**9**
	DNA Sequencing		**5**
	MALDI-TOF Mass Spectrometry		**1**
	HPLC		**2**
	Conventional Biochemicals		**1**
Nontuberculous Mycobacteria	GenProbe/Accuprobe	**15**	
	PCR Assay	**1**	
Acid Fast Bacilli	Conventional Biochemicals		**1**
	Microscopy	**5**	
	Conventional Biochemicals	**1**	

*: Green: acceptable answer
Red: unacceptable answer

RESULTS FOR 13-1G (*Mycobacterium tuberculosis* pan-susceptible)

Identification

Result	Method	Restricted	Comprehensive
M. tuberculosis complex	GenProbe/Accuprobe	32	7
	HPLC		2
	PCR Assay	1	
	Conventional Biochemicals		
M. tuberculosis	GenProbe/Accuprobe	6	6
	Conventional Biochemicals	1	2
	PCR Assay		2
Acid Fast Bacilli	Microscopy	6	

Susceptibility

Antibiotic	Results	# Labs
EMB1	Susceptible	18
INH1	Susceptible	18
PZA	Susceptible	17
	Not offered	1
RIF	Susceptible	18
SM1	Susceptible	16
	Not offered	2

One laboratory was exempt

RESULTS FOR 13-1H (*Mycobacterium bovis* PZA^R)

Identification

Result	Method	Restricted	Comprehensive
M. tuberculosis complex	GenProbe/Accuprobe	30	8
	HPLC		2
	PCR Assay	1	
	Conventional biochemicals		
M. bovis	GenProbe/Accuprobe		
	Conventional biochemicals	1	5
	PCR Assay		2
M. tuberculosis complex, not M. tuberculosis	GenProbe/Accuprobe	5	
	Conventional biochemicals	2	1
Acid Fast Bacilli	Microscopy	6	
M. tuberculosis	GenProbe/Accuprobe		1
Nontuberculous Mycobacteria	GenProbe/Accuprobe	1	

Susceptibility

Antibiotic	Result	# Labs
EMB1	Susceptible	18
INH1	Susceptible	18
PZA	Resistant	17
	Not offered	1
RIF	Susceptible	18
SM1	Susceptible	16
	Not offered	2

One laboratory was exempt

RESULTS FOR 13-1I (*Mycobacterium tuberculosis; INH 0.1^R/ INH 0.4^S*)

Identification

Result	Method	Restricted	Comprehensive
M. tuberculosis complex	GenProbe/Accuprobe	32	7
	HPLC		2
	PCR Assay	1	
	Conventional Biochemicals		
M. tuberculosis	GenProbe/Accuprobe	6	6
	Conventional Biochemicals	1	2
	PCR Assay		2
Acid Fast Bacilli	Microscopy	6	

Susceptibility

Antibiotic	Result	# Labs
EMB1	Susceptible	18
INH1	Resistant	18
INH2	Susceptible	12
	Not offered	5
	Resistant	1
PZA	Susceptible	17
	Not offered	1
RIF	Susceptible	18
SM1	Susceptible	16
	Not offered	2

One laboratory was exempt

RESULTS FOR 13-1J (*Mycobacterium tuberculosis; RIF^R*)

Identification

Result	Method	Restricted	Comprehensive
M. tuberculosis complex	GenProbe/Accuprobe	32	7
	HPLC		2
	PCR Assay	1	
	Conventional Biochemicals		
M. tuberculosis	GenProbe/Accuprobe	6	6
	Conventional Biochemicals	1	2
	PCR Assay		2
Acid Fast Bacilli	Microscopy	6	

Susceptibility

Antibiotic	Result	# Labs
EMB1	Susceptible	18
INH1	Susceptible	18
PZA	Susceptible	17
	Not offered	1
RIF	Resistant	18
SM1	Susceptible	16
	Not offered	2

One laboratory was exempt