Mycobacteriology Proficiency Testing Program
Event 14-1 Results Summary, March 2014

Samples 14-1F, 14-1I and 14-1J contained *Mycobacterium tuberculosis.* Sample 14-1H contained *Mycobacterium bovis* BCG. Sample 14-1G contained no Mycobacteria

I. Microscopy

EXPECTED RESULTS:

	Acid Fast Bacilli
14-1A	Present
14-1B	Absent
14-1C	Present
14-1D	Absent
14-1E	Present

SCORES FOR MICROSCOPY (99 PARTICIPANTS):

	Comprehensive Labs	Restricted Labs	Smears Only Labs	Total
100%	18	46	34	98
80-89%	0	1	0	1
<80%	0	0	0	0

	14-1A	14-1B	14-1C	14-1D	14-1E
Correct answer	99	98	99	99	99
Incorrect answer	1	0	0	0	0

STAINING METHOD

Carbol Fuschin: **42 laboratories (42.4%)**

Flurochrome: **32 laboratories (32.3%)**

Carbol Fuschin + Flurochrome: **25 laboratories (25.3%)**

II. Identification/Drug Susceptibility

SCORES FOR ID

	Comprehensive Labs	Restricted Labs
100%	17	44
90-99%		2
80-89%	1	0
< 80%		0

SCORES FOR SUSCEPTIBILITY

	Comprehensive Labs
100%	18
90-99%	

One laboratory was exempt

OVERALL SCORES (MICROSCOPY, ID AND SUSCEPTIBILITY)

	Comprehensive Labs	Restricted Labs
100%	17	45
90-99%	1	1
80-89%	0	0
< 80%	0	0

RESULTS FOR 14-1F (*Mycobacterium tuberculosis* SM^{R}, INH 0.1^{R}, INH 0.4^{R})

Identification

Result*	Method	Restricted	Comprehensive
***M. tuberculosis* complex**	GenProbe/Accuprobe	**32**	**5**
	HPLC		**2**
	PCR Assay	**2**	
	Conventional Biochemicals		
M. tuberculosis	GenProbe/Accuprobe	**5**	**7**
	Conventional Biochemicals	**1**	**2**
	PCR Assay		**2**
	DNA Sequencing		
Acid Fast Bacilli	Microscopy	**6**	

Susceptibility

Antibiotic	Results	# Labs
EMB1	**Susceptible**	**18**
INH1	**Resistant**	**18**
INH2	**Resistant**	**12**
	Not offered	**6**
PZA	**Susceptible**	**17**
	Not offered	**1**
RIF	**Susceptible**	**18**
SM1	**Susceptible**	**5**$^{\$}$
	Resistant	**10**$^{\$}$
	Not offered	**3**

*: Green: acceptable answer
Red: unacceptable answer

$^{\$}$ 80% consensus was not reached for SM1 testing

RESULTS FOR 14-1G (No Mycobacteria-No growth)

Identification

Result*	Method	Restricted	Comprehensive
No growth of Mycobacteria		**46**	**18**

*: Green: acceptable answer
Red: unacceptable answer

RESULTS FOR 14-1H (*Mycobacterium bovis* INH 0.1^{R}, PZA^{R})

Identification

Result*	Method	Restricted	Comprehensive
***M. tuberculosis* complex**	GenProbe/Accuprobe	**33**	**6**
	PCR Assay	**2**	
	HPLC		**1**
	Conventional Biochemicals	**1**	
M. tuberculosis* complex, not *M. tuberculosis	GenProbe/Accuprobe	**1**	**1**
M. bovis	GenProbe/Accuprobe	**1**	
	Conventional Biochemicals	**1**	**3**
	HPLC		**1**
***M. bovis* BCG**	GenProbe/Accuprobe		3
	PCR Assay		2
M. africanum	GenProbe/Accuprobe	**1**	
	Conventional Biochemicals		**1**
Acid Fast Bacilli	Microscopy	**6**	

Susceptibility

Antibiotic	Results	# Labs
EMB1	**Susceptible**	**18**
INH1	**Susceptible**	**10**[#]
	Resistant	**8**[#]
INH2	**Susceptible**	**6**
	Not offered	**12**
PZA	**Resistant**	**17**
	Not offered	**1**
RIF	**Susceptible**	**18**
SM1	**Susceptible**	**15**
	Not offered	**3**

*: Green: acceptable answer
Red: unacceptable answer

[#] 80% consensus was not reached for INH1 testing

RESULTS FOR 14-1I (*Mycobacterium tuberculosis* pan-susceptible)

Identification

Result*	Method	Restricted	Comprehensive
***M. tuberculosis* complex**	GenProbe/Accuprobe	**32**	**5**
	HPLC		**2**
	PCR Assay	**2**	
	Conventional Biochemicals		
M. tuberculosis	GenProbe/Accuprobe	**5**	**7**
	Conventional Biochemicals	**1**	**2**
	PCR Assay		**2**
	DNA Sequencing		
Acid Fast Bacilli	Microscopy	**6**	

*: Green: acceptable answer
Red: unacceptable answer

Susceptibility

Antibiotic	Results	# Labs
EMB1	**Susceptible**	**18**
INH1	**Susceptible**	**18**
PZA	**Susceptible**	**17**
	Not offered	**1**
RIF	**Susceptible**	**18**
SM1	**Susceptible**	**15**
	Not offered	**3**

RESULTS FOR 14-1J (*Mycobacterium tuberculosis* RMP^{R})

Identification

Result*	Method	Restricted	Comprehensive
***M. tuberculosis* complex**	GenProbe/Accuprobe	**32**	**5**
	HPLC		**2**
	PCR Assay	**2**	
	Conventional Biochemicals		
M. tuberculosis	GenProbe/Accuprobe	**5**	**7**
	Conventional Biochemicals	**1**	**2**
	PCR Assay		**2**
	DNA Sequencing		
Acid Fast Bacilli	Microscopy	**6**	

Susceptibility

Antibiotic	Results	# Labs
EMB1	**Susceptible**	**18**
INH1	**Susceptible**	**18**
PZA	**Susceptible**	**17**
	Not offered	**1**
RIF	**Resistant**	**18**
SM1	**Susceptible**	**15**
	Not offered	**3**

*: Green: acceptable answer
Red: unacceptable answer