# GUIDANCE ON BIO-SAFETY RELATED TO TB LABORATORY DIAGNOSTIC PROCEDURES

#### - EXPERT GROUP MEETING -

Date and time:

8-9 April 2009, 09:00 - 17:30

Venue:

World Health Organization, Geneva, Switzerland

#### **Background**

After years of neglect and with the expansion of culture and drug susceptibility testing capacity to respond to the challenges of HIV-associated and drug-resistant tuberculosis (TB), bio-hazard in laboratories is a critical issue. Laboratory-acquired TB infections are poorly documented; however, the excess risk faced by laboratory workers in acquiring TB infection and/or disease has been well-described (IJTLD 1998, 2:690-693; IJTLD 2003, 7:879-885, PLOSMed 2006, 3:2376-2391) and a retrospective study in Korea (IJTLD 2007, 11, 138-142) showed that the relative risk of TB compared to the general population was found to be 1.4 in microscopists and 21.5 among technicians carrying out drug-susceptibility testing.

An international technical consultation on bio-safety in laboratories, co-organized by WHO and CDC with key experts, was held in Atlanta in September 2008. The technical consultation provided consensus on the design and format of bio-safety guidance for laboratory activities based on a risk-assessment approach. Specific guidance on bio-safety pertaining to TB-specific laboratory activities, including adequate design and layout of laboratories, safety equipment, waste disposal, incident management, etc.. was identified as an urgent need, especially in the context of rapid expansion of culture and DST capacity in resource-limited settings.

#### Meeting objectives

The aim of the Expert Group meeting will be to:

- Develop guidance addressing facility layout, adequate safety equipment, equipment specifications and maintenance, and work practices for each laboratory procedure;
- Provide materials and sources of documentation to be assembled by a WHO consultant;
- Define the outline for a laboratory bio-safety training package to be developed in tandem.

# **Expected outcomes**

- Development of guidance for bi-safety adapted to conventional and newly developed laboratory techniques for TB diagnosis.
- Outline of a training package based on the guidance document

#### **Participants**

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# AGENDA

# Wednesday, 8 April 2009

Chair: Chris Gilpin

08:30 - 09:00	Registration	
09:00 - 09:10	Welcome and background	V. Vincent
09:10 -09:20	Declaration of Interest	V. Vincent
09:20 - 09:50	Review of WHO/CDC biosafety consultation:  definition of BSL2/BSL3 with prescriptive solutions for low-income countries.  Guidance on options and advantages/disadvantages of different configurations for achieving directional airflow with BSCs and exhaust systems	P. Jensen
09:50 - 10:30	Discussion	
10:30 - 11:00	Coffee	
11:00 - 11.30	Review of WHO/CDC biosafety consultation: Biosafety recommendations for TB diagnostic methods including microscopy, culture, drug- susceptibility testing and line-probe assays	V. Vincent
11:30 - 11:45	Biosafety recommendations for direct culture and DST in a closed system	M. Perkins
11:45 - 12:30	Discussion	Chair
12:30 - 13:30	Lunch	
13:30 - 15:00	Outline of a biosafety manual for TB laboratories: laboratory infrastructure and layout	All
15:00 - 15:30	Coffee	
15:30 - 17:00	Outline of a biosafety manual for TB laboratories(cont): Identification of available materials Literature to be cited	All
17:00 - 17:30	Summary and action points	Chair
	Closure	00





# Thursday, 9 April 2009

# Chair John Ridderhof

09:00 - 10:30	Outline of a biosafety manual for TB laboratories(cont):	All
	Technical procedures and protective personal equipment	
10:30 - 11:00	Coffee	
11:00 - 12:30	Identification of available materials Literature to be cited	All
12:30 - 13:30	Lunch	
13:30 - 14:15	Review of training materials for the development of a biosafety training package	D. Cirillo
14:15 - 15:00	Discussion	P. Dubois/N. Previsani
15:00 - 15:30	Coffee	
15:30 - 17:00	Assembling available training materials for a biosafety training package for TB laboratories	
17:00 - 17:30	Final action points	Chair
17:30	Closure	



