

## STANTON TERRITORIAL HEALTH AUTHORITY

## Yellowknife, Northwest Territories

TITLE: Mycobacteria Smear Fixing	Revision Date:	Issue Date:
_	07-April-2017	07-April-2015
Document Number: MIC80810	Status: Approved	
Distribution: Mycobacteria Manual	Page: 1 of 2	
Approved by:	Signed by:	
Gloria Badari, Director, Corporate Services	(Original Signed Copy in	
and Chief Financial Officer	Microbiology)	

## **PURPOSE:**

To standardize how to safely and effectively fix Mycobacteria smears.

#### **INTRDUCTIONS:**

Phenolized alcohol is the "gold standard" to achieve complete kill of Mycobacteria in smears. The purpose of fixing smears before staining is to render infectious agents non-viable.

## **SPECIAL SAFETY PRECAUTIONS:**

- Handle all patient samples and testing reagent using "Routine Practices"
- Please refer to the Northwest Territories Infection Prevention and Control Manual,
   March 2012
- Prior to testing all patient are to be identified as per I-0500 Use of Two Patient Identifiers.

#### **SUPPLIES:**

Alcohol wipes

5% phenol alcohol

Clean frosted glass slides

Pencil

• Transfer Pipette 5 mL

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# **PROCEDURE: HOW TO FIX SLIDES**

Step	Action				
5% Ph	5% Phenol in alcohol is an approved and widely used method for complete fixation of acid				
fast ba	fast bacilli. Studies have shown that a 10 minute fix in 5% phenol-alcohol have 100% kill				
rate of tubercle bacilli.					
1	Refill orange topped container with phenol alcohol if needed.				
2	Ensure the slides are spaced out so that they do not touch one another (phenol may				
	spread out and accidently carry AFB to another patient smear).				
3	Use a transfer 5 mL pipette to dispense phenol alcohol over all smears. Completely flood				
	the ENTIRE slide, not just the portion where the dried sample is placed (fix any droplets				
	that may have splashed outside the inoculums area).				
4	Fix for a minimum of 10 minutes.				
	Smears are ready for staining.				

# **REFERENCES:**

• Central Public Health Laboratory. (2003). *Mycobacteriology Bench Manual*. Ottawa.

# **REVISION HISTORY:**

REVISION	DATE	Description of Change	REQUESTED BY
1.0	31-Jan-15	Initial Release	L. Driedger
	03Feb2015	Review	S. Webber
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